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Product Guide

XP-640

Version 1.5 December 5, 2024

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Version	Date	Contents
1.0	March 29, 2024	First edition
1.1	July 5, 2024	Changes due to migration to Roland DG SwipeGuide
1.2	July 31, 2024	Corrected the wording of “Nozzle Mask Function”
1.3	October 17, 2024	P22 Print Head Information added.
1.4	November 18, 2024	Wiper wording changed
1.5	December 5, 2024	Cover Open Tour add

Contents

1. Product Information

- Model/Software Name
  - Series name: TrueVIS
    - 64-inch Solvent Printing Machine
  - Outline
    - Ink
      - TH ink Solvent ink in paper cartridge
      - Capacity: 500ml
    - Ink type
      -CMYKCMYK (4 colors)
      -CMYKLkOrGrRe (8 colors)
    - Supported software
      - VersaWorks (Ver.6.22.0 or later)
      - Roland DG Connect (Ver.3.8.0 or later)

TrueVIS
XP-640

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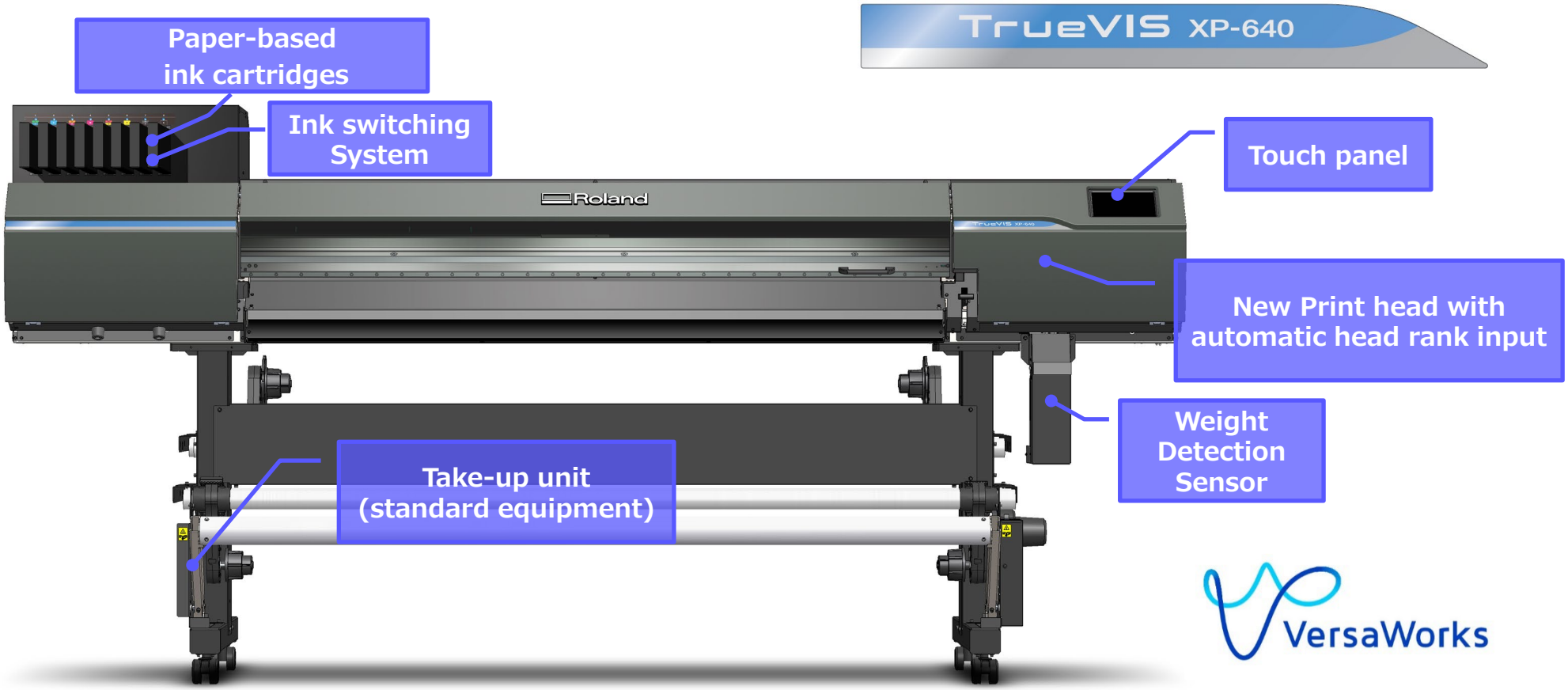
- Outline



Optional Item	
Dryer Unit	DU3-64

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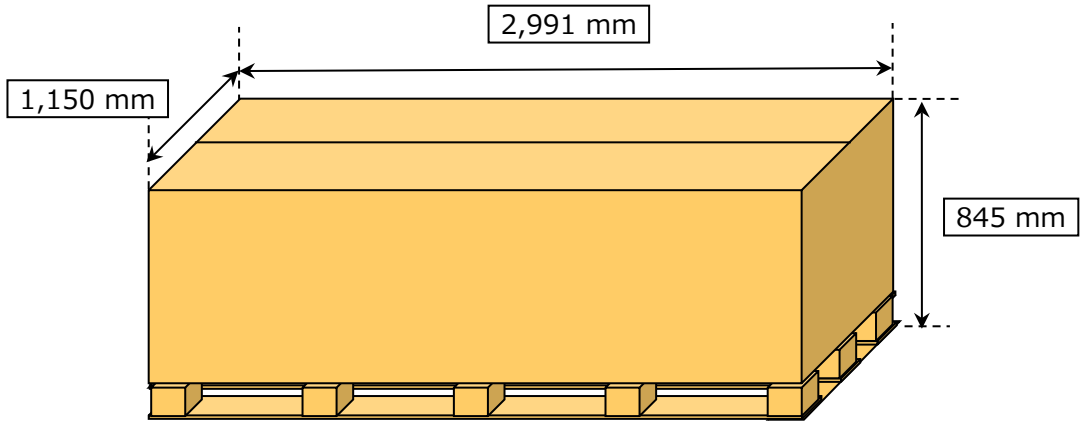
- Outline Rev.1.5
  - Cover Open Tour

XP-640 CoverOpenTour

https://365rolanddg.sharepoint.com/sites/extranet/Hardware%20Information/XP-640_CoverOpenTour.mp4

- Specifications

	XP-640
Media Width	259 to 1,625 mm Roll outer diameter 250 mm or less, inner diameter 3" or 2
Media Weight	Max. 45 kg
Weight	189 kg
Power Consumption	100-240V: Approx. 1,180W during operation In sleep mode: approx. 50W
Packing size (including skids)	2,991 mm × 1,150 mm × 845 mm
Packing weight (including skids)	275.8 kg



2. Printing Theory

- Printing speed
  4Colors (CMYK)

Default mode

Media	Print quality	Resolution(dpi)		Pass	Direction	Scan speed (mm/s)	Throughput	
		Scan	Feed				(m2/h)	(ft2/h)
Generic Vinyl1	High Quality	1200	1800	12	Bi	914	12.1	130.2
		1200	1200	8	Bi	914	18.1	194.8
	Standard	900	1200	8	Bi	1219	22.5	242.2
		900	1200	6	Bi	1219	30.4	327.2
	High Speed	600	1200	4	Bi	914	36.9	397.2
		900	600	4	Bi	1219	46.8	503.8
Generic Vinyl2	High Quality	1200	1800	12	Bi	914	12.1	130.2
		1200	1200	8	Bi	914	18.1	194.8
	Standard	900	1200	8	Bi	1219	22.5	242.2
		900	1200	6	Bi	1219	30.4	327.2
	High Speed	600	1200	4	Bi	914	36.9	397.2
		900	600	4	Bi	1219	46.8	503.8

- Printing speed
  4Colors (CMYK)

Default mode

Media	Print quality	Resolution(dpi)		Pass	Direction	Scan speed (mm/s)	Throughput	
		Scan	Feed				(m2/h)	(ft2/h)
Generic Banner1	High Quality	1200	1200	8	Bi	914	18.1	194.8
	Standard	900	1200	8	Bi	1219	22.5	242.2
		900	1200	6	Bi	1219	30.4	327.2
	High Speed	600	1200	4	Bi	914	36.9	397.2
		600	1200	3	Bi	914	50.2	540.4
	BillBoard	900	600	3	Bi	1219	63.0	678.1
		600	1200	2	Bi	914	76.1	819.1
Generic Banner2	High Quality	1200	1200	8	Bi	914	18.1	194.8
	Standard	900	1200	8	Bi	1219	22.5	242.2
		900	1200	6	Bi	1219	30.4	327.2
	High Speed	600	1200	4	Bi	914	36.9	397.2
		600	1200	3	Bi	914	50.2	540.4
	BillBoard	900	600	3	Bi	1219	63.0	397.2
		600	1200	2	Bi	914	76.1	540.4

- Printing speed
  4Colors (CMYK)

Default mode

Media	Print quality	Resolution(dpi)		Pass	Direction	Scan speed (mm/s)	Throughput	
		Scan	Feed				(m2/h)	(ft2/h)
Generic Paper	High Quality	1200	1800	12	Bi	914	12.1	130.2
		1200	1200	8	Bi	914	18.1	194.8
	Standard	900	1200	8	Bi	1219	22.5	242.2
		900	1200	6	Bi	1219	30.4	327.2
	High Speed	600	1200	4	Bi	914	36.9	397.2
Generic Backlit	High Quality	1200	1800	12	Bi	457	3.3	35.5
	Standard	900	1200	8	Bi	609	6.4	68.9
	High Speed	900	1200	6	Bi	760	10.4	111.9
Generic Heat Transfer Sheet	High Quality	1200	1800	16	Bi	914	9.1	98.0
		1200	1800	12	Bi	914	12.1	130.2
	Standard	1200	1200	8	Bi	914	18.1	194.8
		900	1200	8	Bi	1219	22.5	242.2
	High Speed	900	1200	6	Bi	1219	30.4	327.2
		600	1200	4	Bi	914	36.9	397.2

- Printing speed

8Color (CMYKLkOrGrRe)

Default mode

Media	Print quality	Resolution(dpi)		Pass	Direction	Scan speed (mm/s)	Throughput	
		Scan	Feed				(m2/h)	(ft2/h)
Generic Vinyl1	High Quality	1200	1800	12	Bi	914	6.1	65.7
		1200	1200	8	Bi	914	9.1	98.0
	Standard	900	1200	8	Bi	1219	11.3	121.6
		900	1200	6	Bi	1219	15.2	163.6
	High Speed	600	1200	4	Bi	914	18.5	199.1
		900	600	4	Bi	1219	23.4	251.9
Generic Vinyl2	High Quality	1200	1800	12	Bi	914	6.1	65.7
		1200	1200	8	Bi	914	9.1	98.0
	Standard	900	1200	8	Bi	1219	11.3	121.6
		900	1200	6	Bi	1219	15.2	163.6
	High Speed	600	1200	4	Bi	914	18.5	199.1
		900	600	4	Bi	1219	23.4	251.9

- Printing speed

8Color (CMYKLkOrGrRe)

Default mode

Media	Print quality	Resolution(dpi)		Pass	Direction	Scan speed (mm/s)	Throughput	
		Scan	Feed				(m2/h)	(ft2/h)
Generic Banner1	High Quality	1200	1200	8	Bi	914	9.1	98.2
		900	1200	8	Bi	1219	11.3	121.6
	Standard	900	1200	6	Bi	1219	15.2	163.6
		600	1200	4	Bi	914	18.5	199.1
	High Speed	600	1200	3	Bi	914	25.1	270.2
		900	600	3	Bi	1219	31.5	339.1
	Billboard	600	1200	2	Bi	914	38.1	410.1
Generic Banner2	High Quality	1200	1200	8	Bi	914	9.1	98.2
		900	1200	8	Bi	1219	11.3	121.6
	Standard	900	1200	6	Bi	1219	15.2	163.6
		600	1200	4	Bi	914	18.5	199.1
	High Speed	600	1200	3	Bi	914	25.1	270.2
		900	600	3	Bi	1219	31.5	339.1
	Billboard	600	1200	2	Bi	914	38.1	410.1

- Printing speed

8Color (CMYKLkOrGrRe)

Default mode

Media	Print quality	Resolution(dpi)		Pass	Direction	Scan speed (mm/s)	Throughput	
		Scan	Feed				(m2/h)	(ft2/h)
Generic Paper	High Quality	1200	1800	12	Bi	914	6.1	65.7
		1200	1200	8	Bi	914	9.1	98.0
	Standard	900	1200	8	Bi	1219	11.3	121.6
		900	1200	6	Bi	1219	15.2	163.6
	High Speed	600	1200	4	Bi	914	18.5	199.1
		900	600	4	Bi	1219	23.4	251.9
Generic Backlit	High Quality	1200	1800	8	Bi	457	2.5	26.7
	Standard	900	1200	8	Bi	609	3.2	34.4
		900	1200	6	Bi	609	4.3	46.3
	High Speed	600	1200	3	Bi	609	8.6	92.3
Generic Heat Transfer Sheet	High Quality	1200	1800	16	Bi	914	4.6	49.5
		1200	1800	12	Bi	914	6.1	65.7
	Standard	1200	1200	8	Bi	914	9.1	98.0
		900	1200	8	Bi	1219	11.3	121.6
	High Speed	900	1200	6	Bi	1219	15.2	163.6
		600	1200	4	Bi	914	18.5	199.1

- Ink Consumptions
  4Colors (CMYK)

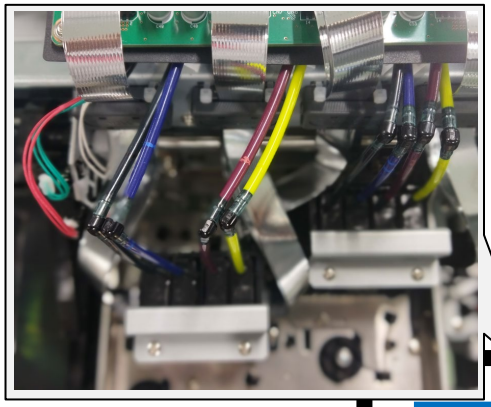
Media	Resolution (dpi)	Pass	Ink Consumption (ml)			
			CMYKLkOrGrRe		CMYK	
			N2A	N5A	N2A	N5A
Generic Vinyl	1200x1800	12	9.4	5.2	9.1	4.9
	1200x1200	8	9.0	4.9	9.1	5.0
	900x1200	8	9.4	5.0	9.8	5.2
		6	8.6	4.7	9.0	4.8
	600x1200	4	8.9	4.7	8.8	4.6
	900x600	4	8.3	4.4	7.8	4.1
Generic Banner	1200x1200	8	11.7	5.9	12.8	6.3
	900x1200	8	11.1	5.7	11.4	5.8
		6	10.4	5.5	11.2	5.7
	600x1200	4	10.8	5.5	10.1	5.2
		3	10.1	5.1	9.6	5.0
		2	9.8	5.1	9.0	4.7
	900x600	3	9.2	4.8	9.1	4.7

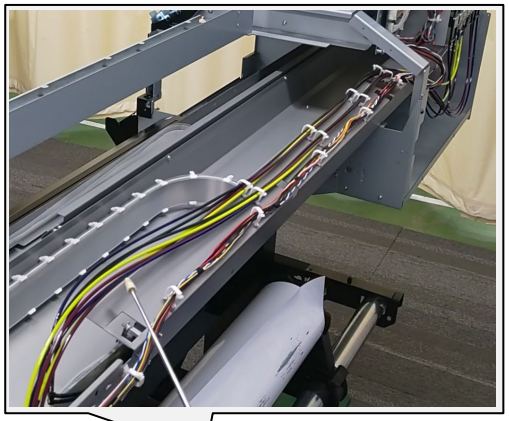
N2A
(A0 size)

N5A
(A0 size)

3. Ink line

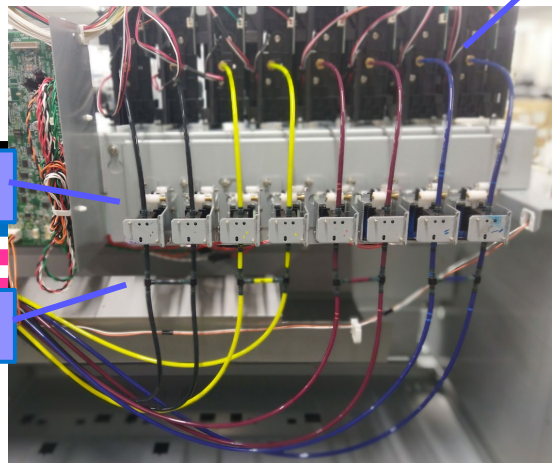
- Ink Line (4Color)





Ink Cartridge Holder

Bk Bk Ye Ye Mg Mg Cy Cy



Choke Valves

Joint

Damper

Damper Cover

Print Head

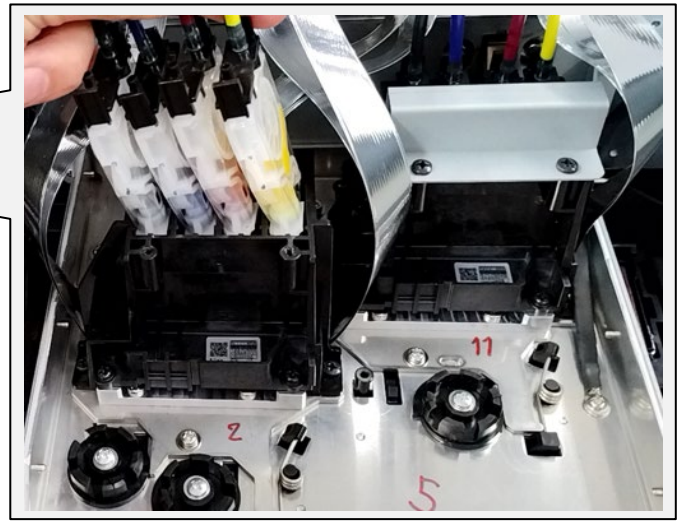
Print Head Cap

Damper Cover

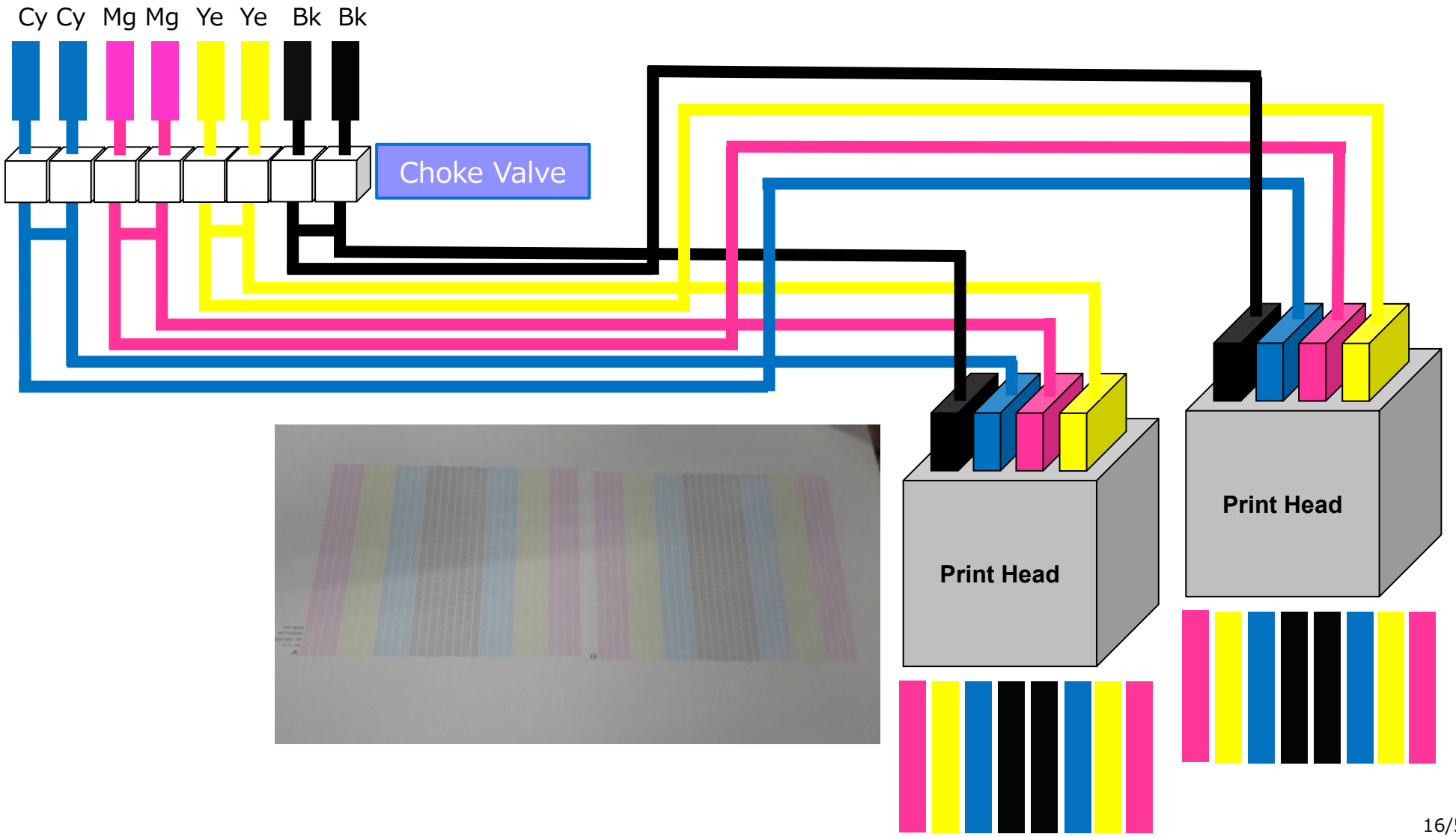
Print Head

Print Head Cap

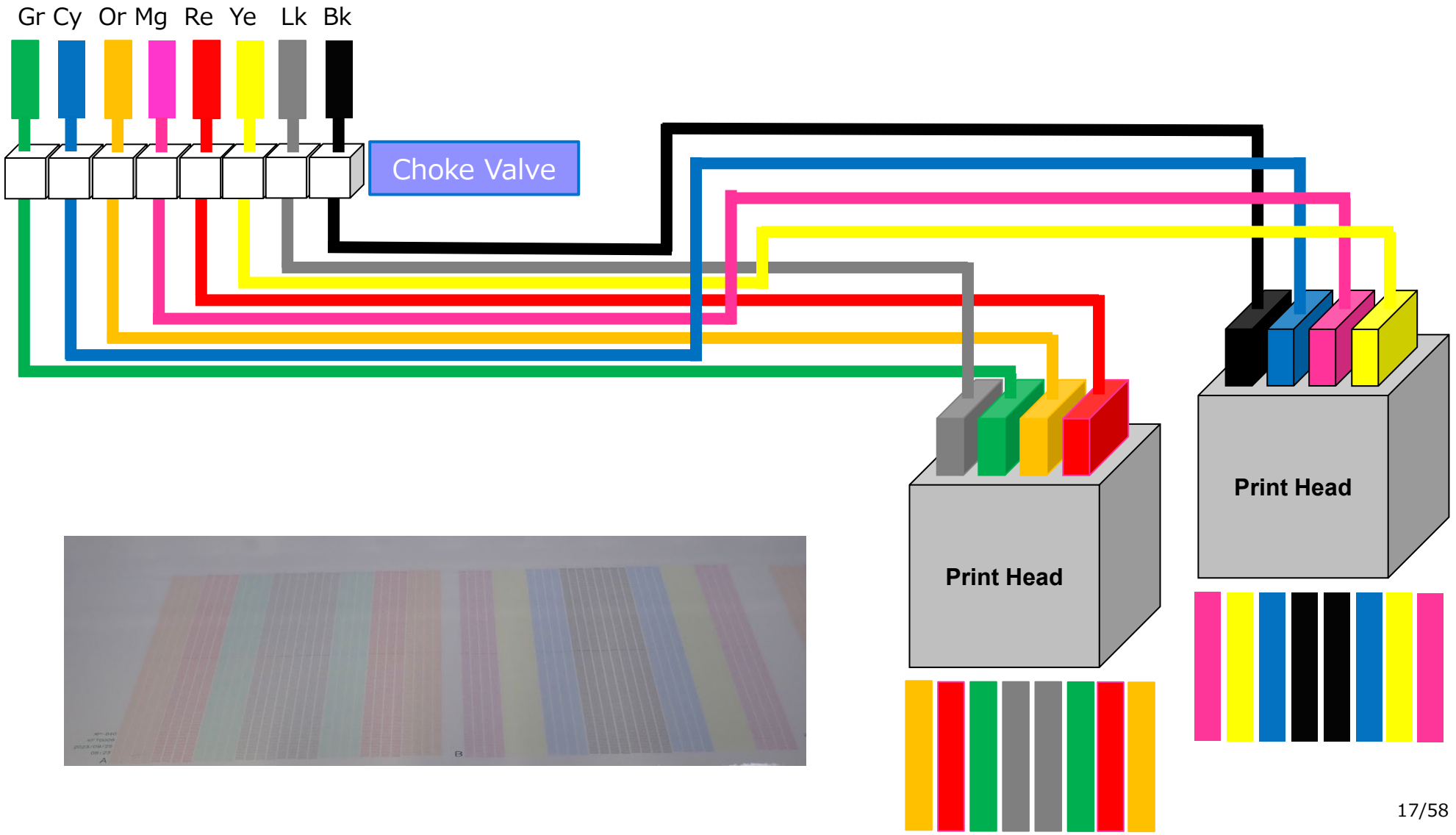
Print Head Cap



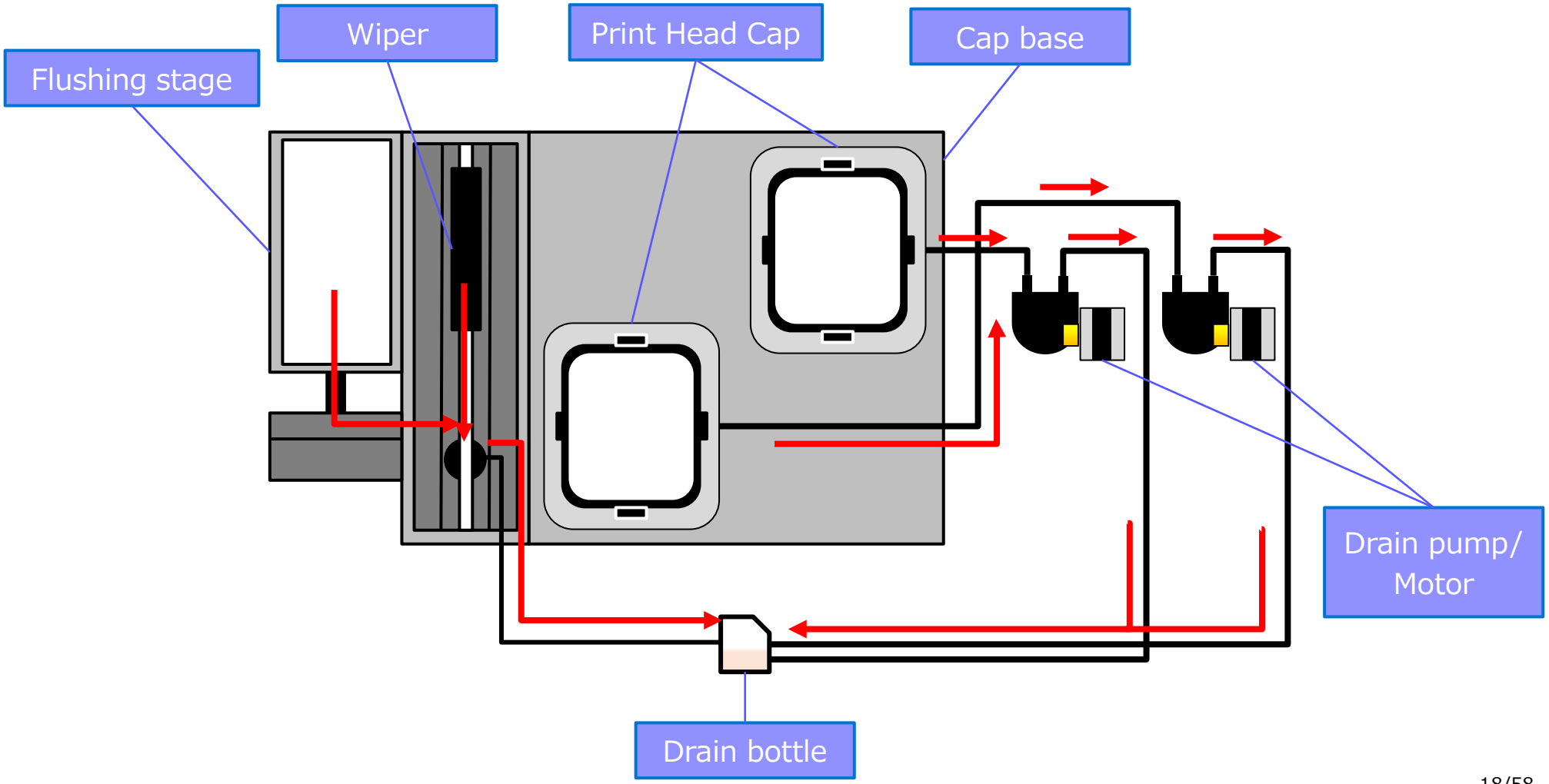
- Ink Line (4Color)
  - CMYKCMYK



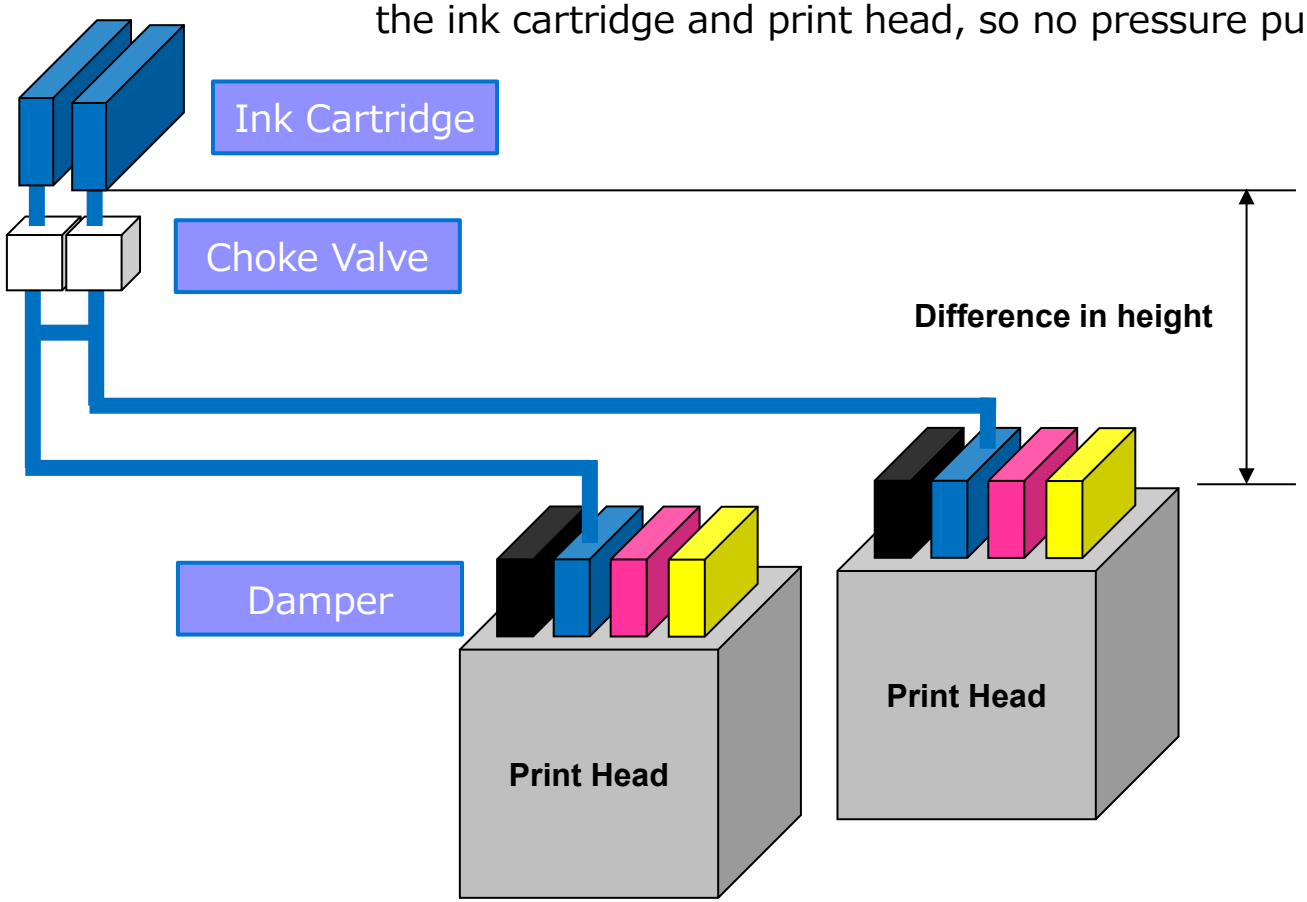
- Ink Line (8Color)
  - CMYKLkGrOrRe

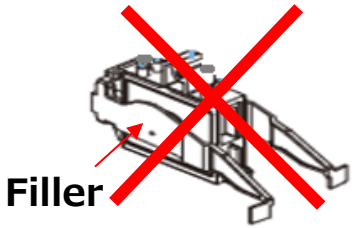


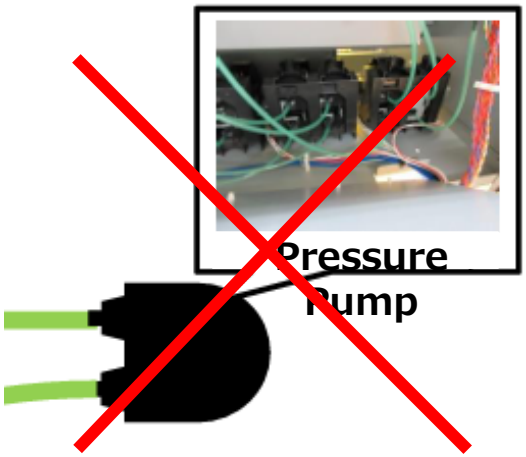
- Ink line
  - Cleaning liquid and ink line（Print Head Cap/Wiper unit to drain bottle）



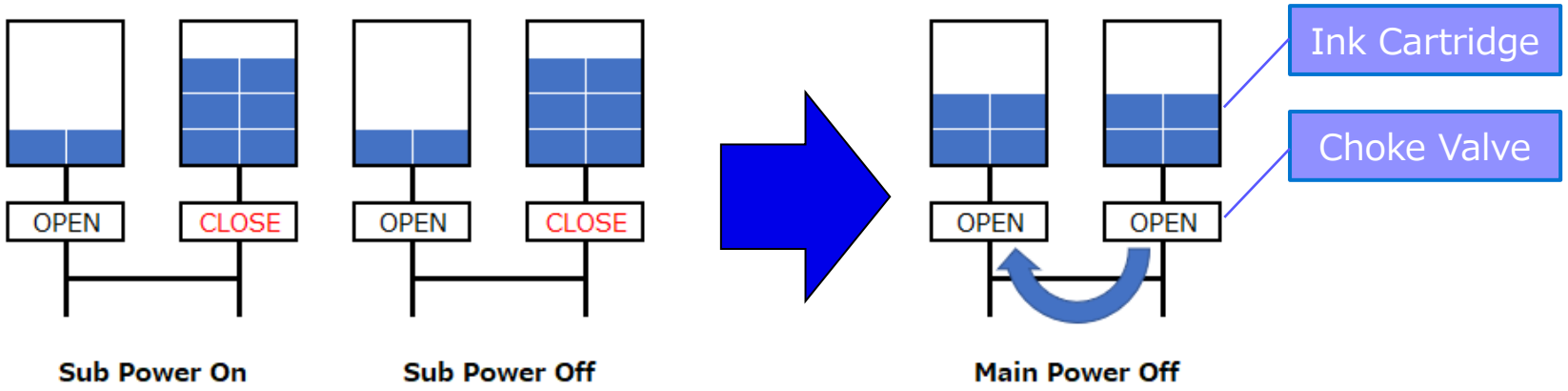
- Ink line (Image is 4 Color)
  - Ink line structure is simple which is the same as VS series. Pressure pump, filler are not equipped.
    - Choke valve: For switching ink. When ink on one side runs out, the choke valve will be automatically switched to supply ink from the other side.
    - Damper: For storing ink to ensure a stable supply of ink to the print head.
    - Ink supply: Ink is supplied by the weight of the ink using the height difference between the ink cartridge and print head, so no pressure pump or filler is equipped.



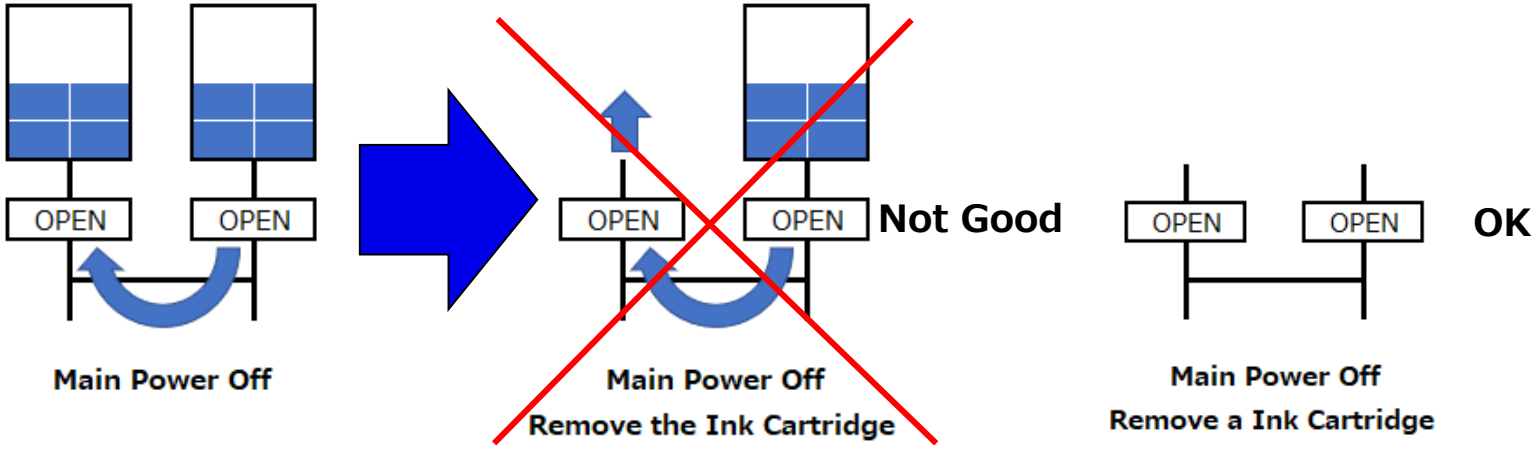




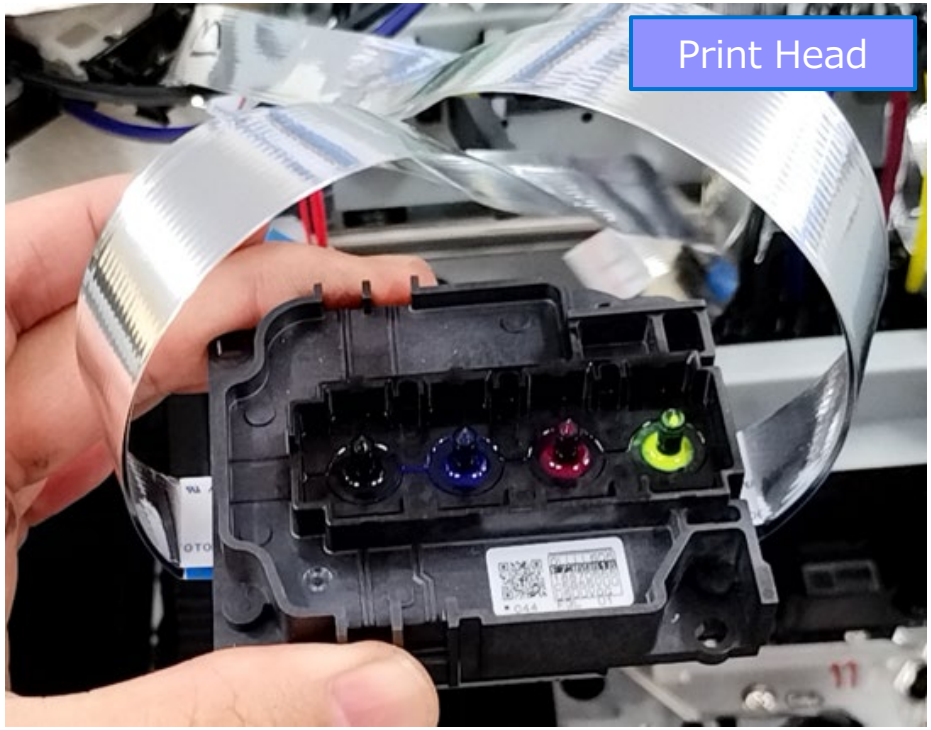
- Ink line (Only when converted to 4color)
  - Equalization of ink levels and choke valve mechanism
    - ❖When the sub power is turned off, the choke valve of the cartridge in use remains open and the choke valve of the cartridge not in use remains closed. However, when the main power is turned off, both choke valves are opened and the ink flows from the ink cartridge with more ink to the one with less ink.

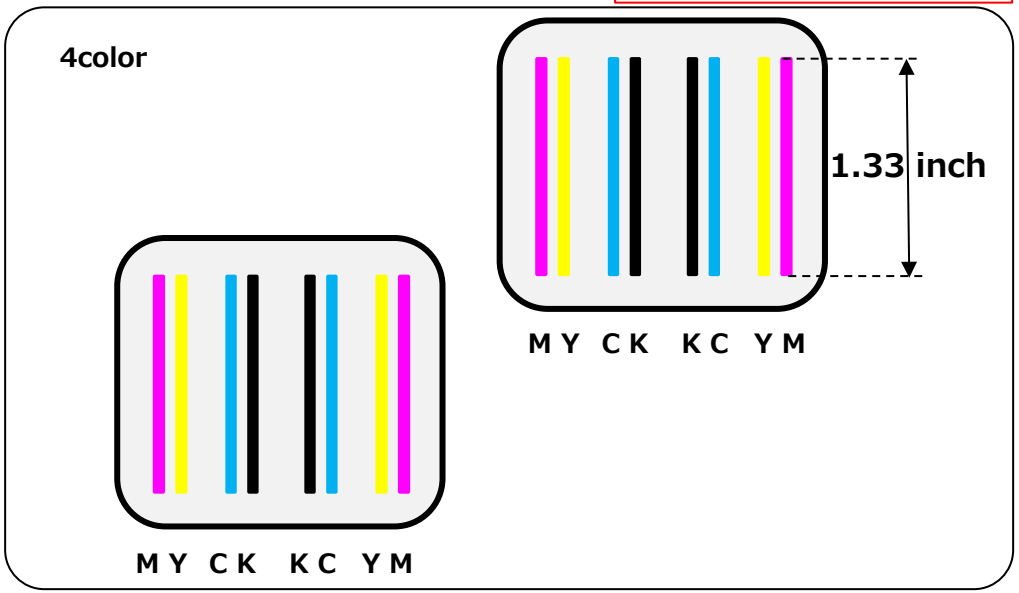


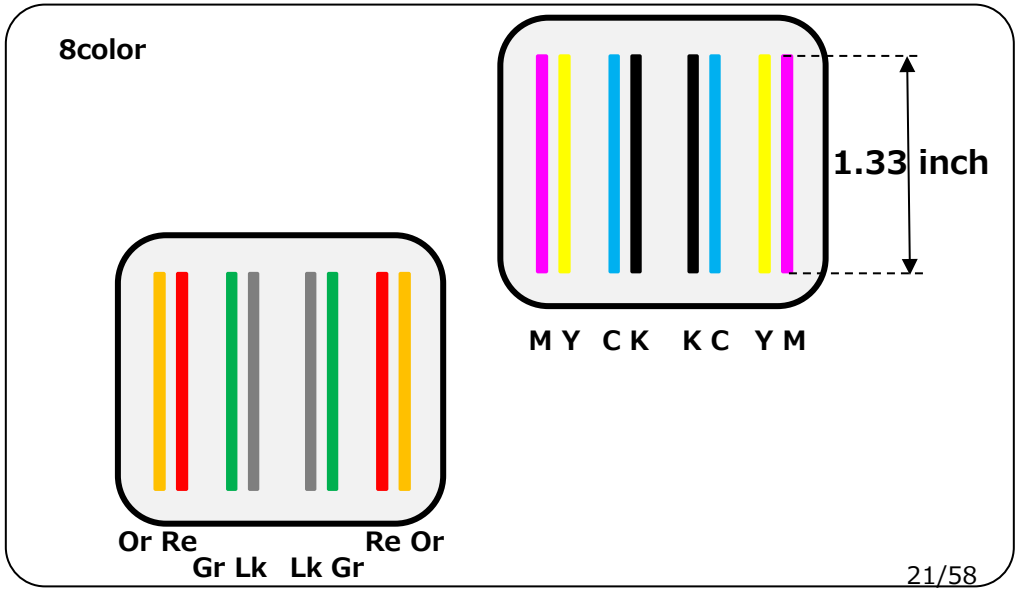
    - ❖ If you pull out one of the ink cartridges with the main power off, ink will leak from the needle tip. Therefore, when removing an ink cartridge with the main power off, remove both cartridges.



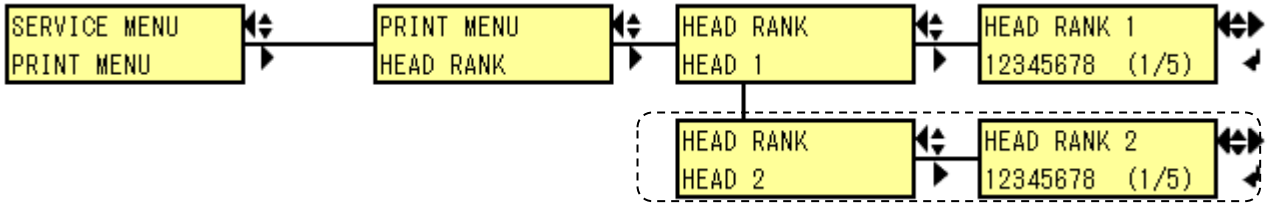
- Print Head Information
  - Equipped with a new print head that delivers both high speed and high image quality.
    - 600 npi (300 npi x 2 lines)
    - Nozzles: 3,200
    - Nozzle lines: 8
    - Printing range: 1.33 inches







- Print Head Information
  - The head rank is automatically entered after the sub power is turned on.
    Head rank information can be checked from [PRINT MENU] > [HEAD RANK].



Note: Note: The head rank can be entered manually from the Service menu, but the head rank is automatically updated when the sub power is turned off/on. The head rank listed on the printheads and the head rank that appears on the Peck2 system report with automatic input have different character strings (because automatic input omits the part of the head rank that is not involved in dispensing).

  - Head rank information can be found in the Peck2 system report. The print head specific serial number can also be checked.

Head rank

Head Serial Number

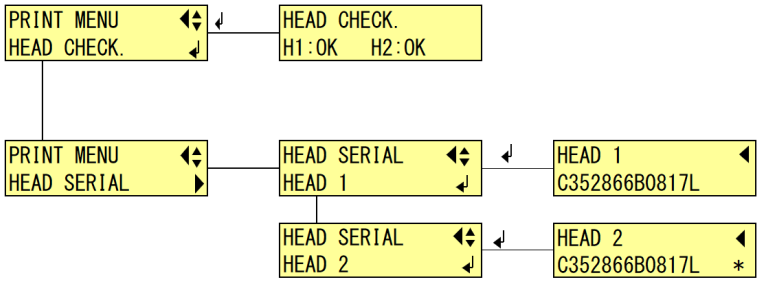
```
 PRINT HEATER: 25° C /  76° F
DRYER: 24° C /  74° F
HEATER SETTING
 PRINT HEATER: 40° C / 104° F
DRYER: 50° C / 122° F
HEATER ADJUST
 PRINT HEATER: 0° C
DRYER: 0° C
HEAD
HEAD RANK H1: 0LKKL6D676F687E7F817D545855550000000000
HEAD RANK H2: 0LLLL6B677169847F827A585857560000000000
HEAD SERIAL H1: E2C186610402S
HEAD SERIAL H2: E2C186610288S
HEAD HEIGHT: LOW
```

Print Head Information Rev.1.3

The history of [HEAD GROUP] is now automatically cleared by performing [HEAD CHECK]. (FWver.1.30 or later)

Work Procedure

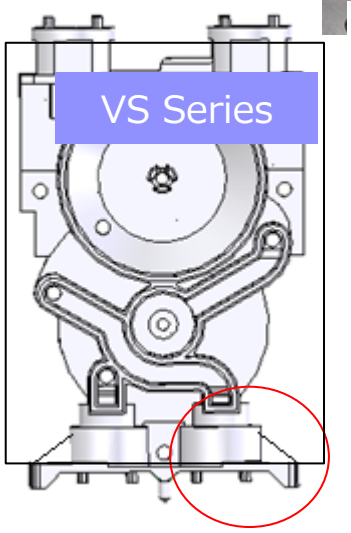
1. Replace the print head with a new one.
2. Perform [HEAD CHECK], and if successful, [HEAD SERIAL] will be automatically registered in the printer.
   [SERVICE MENU] > [PRINT MENU] > [HEAD CHECK]
3. When a new [HEAD SERIAL] is registered, the history of [HEAD GROUP] is automatically cleared.

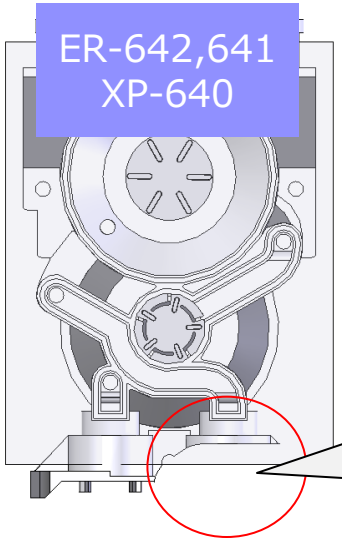


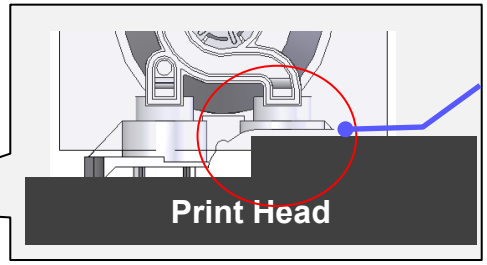
If the serial registered in the printer and the head serial actually connected to the machine do not match, the "＊" mark appears.

⚠CAUTION
Information is not updated by turning the power ON/OFF, or directly entering the head rank, etc. Be sure to perform [HEAD CHECK] when updating information.

- Print Head Information
  - Damper is changed from VS series damper to a type that uses only one ink line.







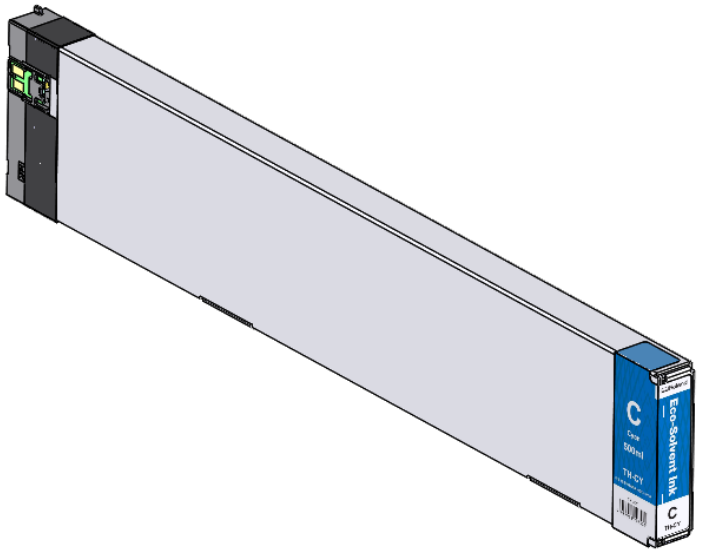
Cut

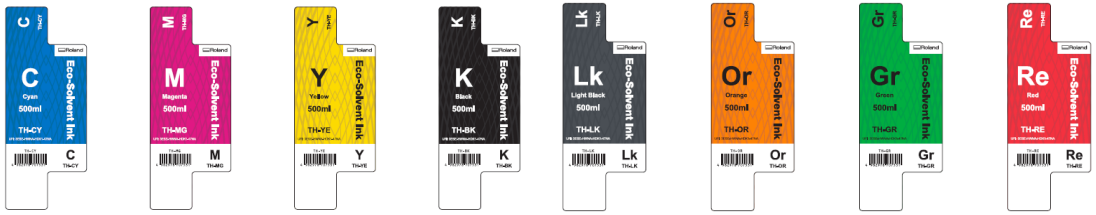
Tip of the damper is cut to fit the print head step. The damper on VS series and XP-640 are not compatible.

4. Ink

- Ink Cartridge

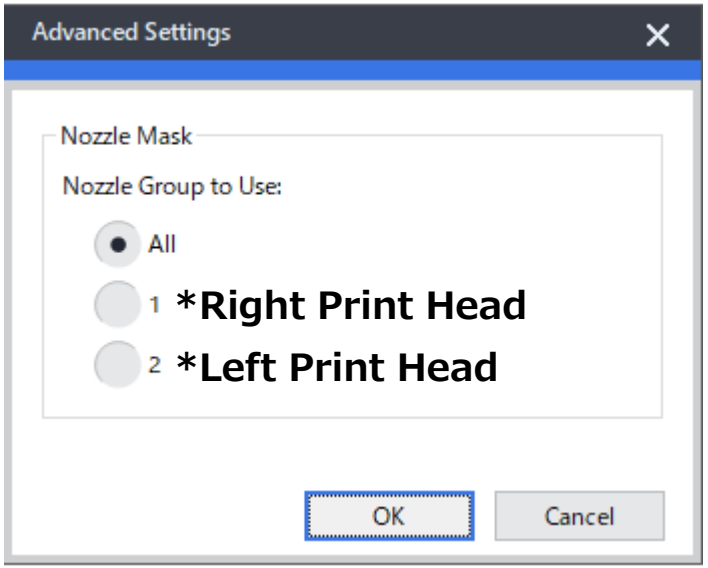
  - Model No.
    - TH-CY/MG/YE/BK/LK/OR/GR/RE
  - Capacity
    - 500ml
  - Expiration date
    - 24 months
  - Features
    - Please refer to the D-EA Ink Product Guide for ink details.
    - Environmentally friendly paper-based ink cartridges

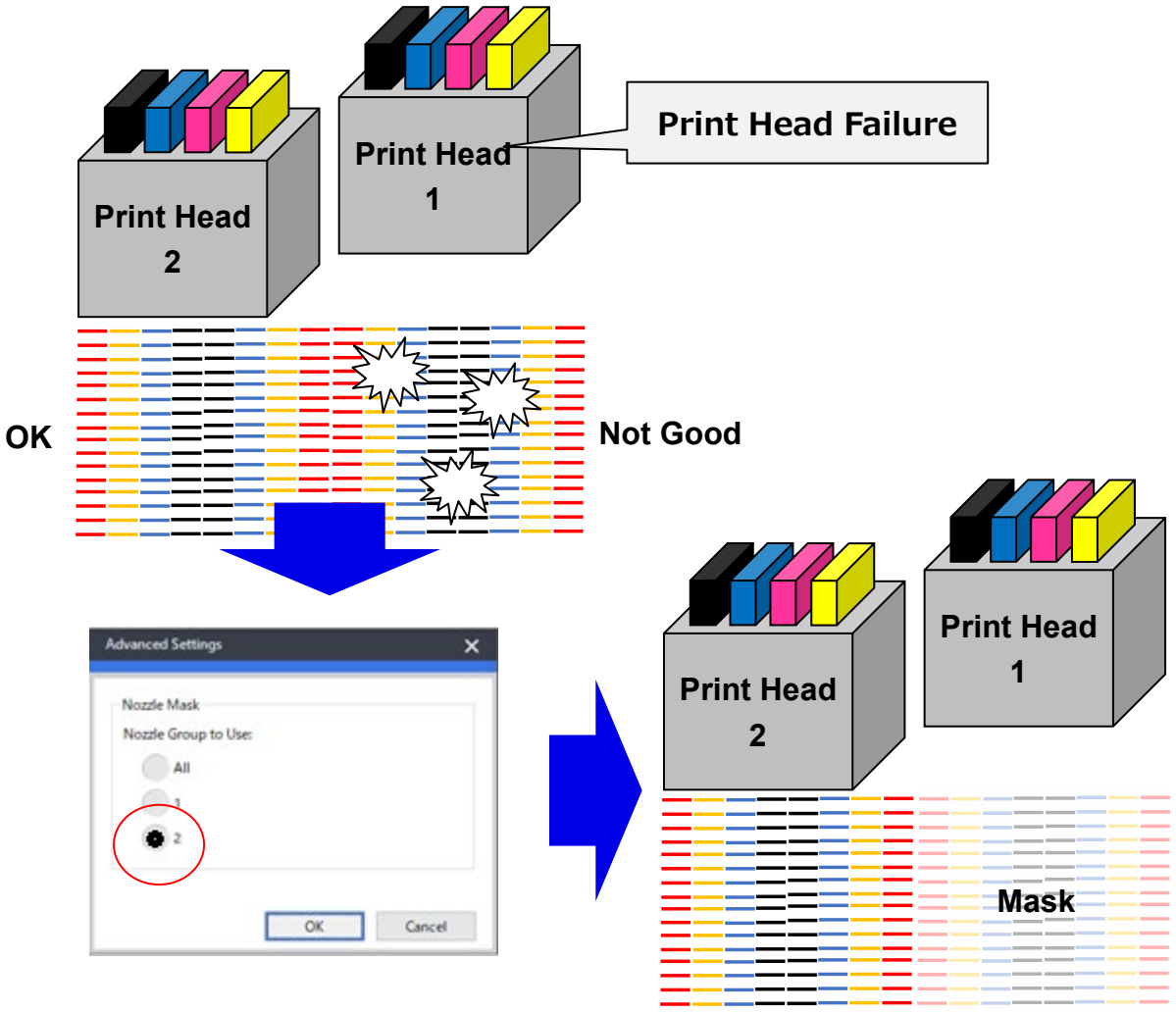




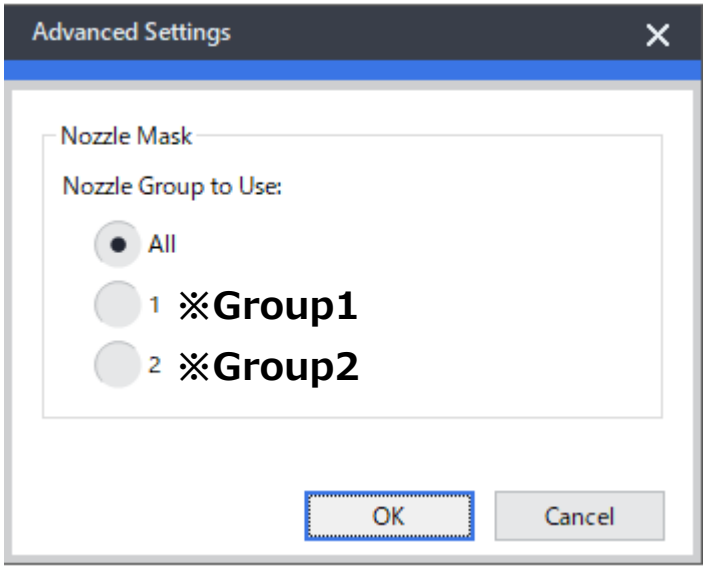
5. Features & Changes

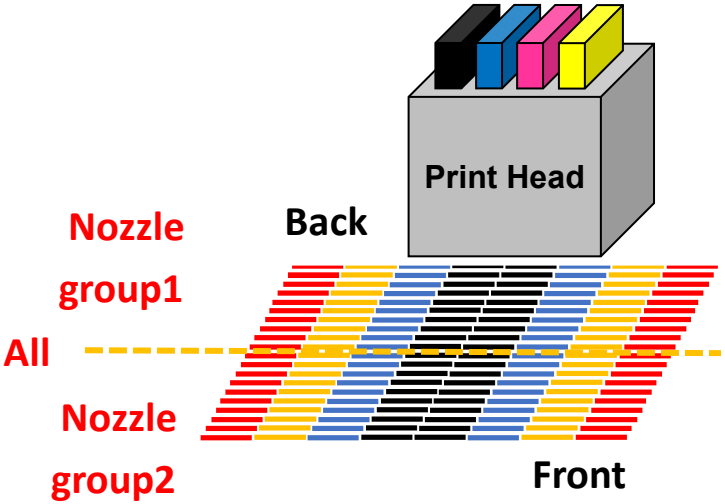
- Nozzle Mask Function(4color) Rev.1.2
  - Printing with a single print head is possible by using nozzle mask function.

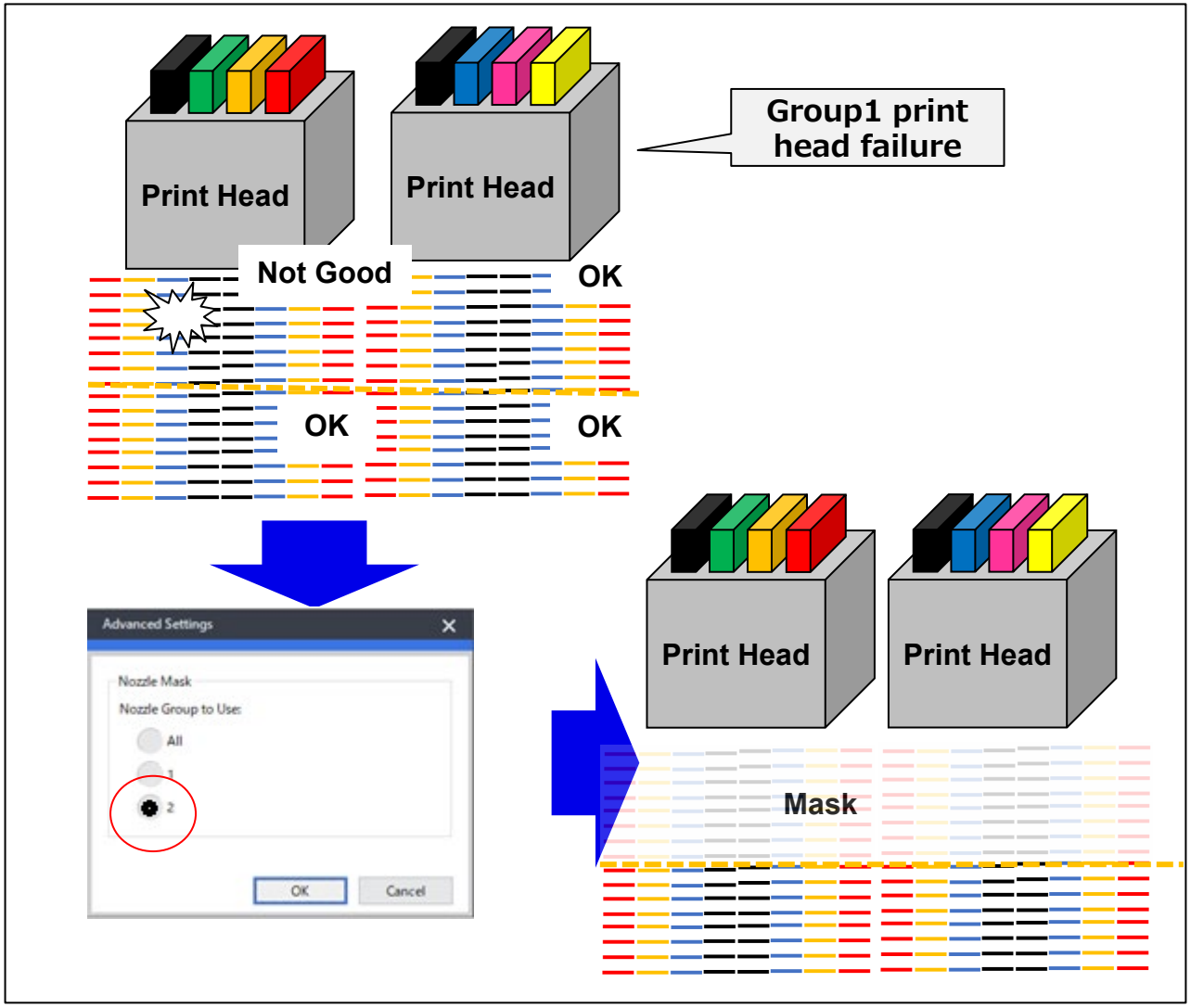




- Nozzle Mask Function (8color) Rev.1.2
  - You can select either the front or rear print head to enable printing with half of the nozzles.

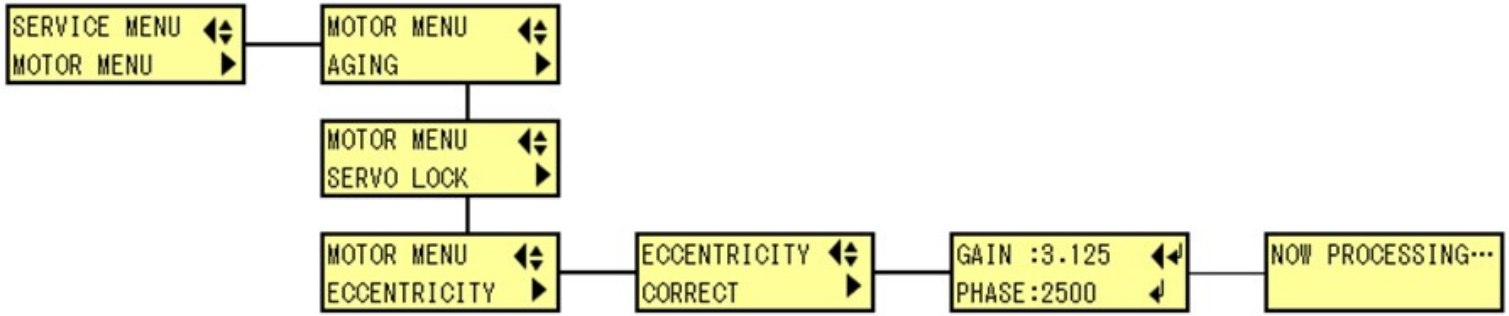






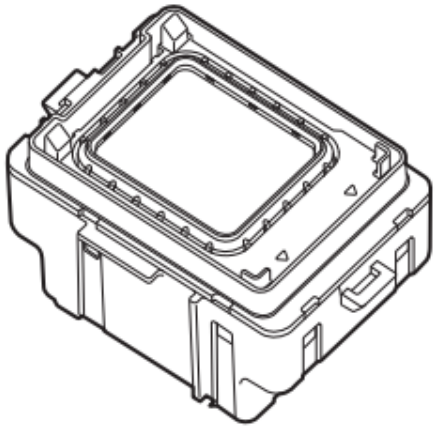
Rev.1.1

- Correction work after scan motor replacement
  - After replacing the scan motor, perform scan motor eccentricity compensation from [MOTOR MENU] > [ECCENTRICITY] in the service menu.

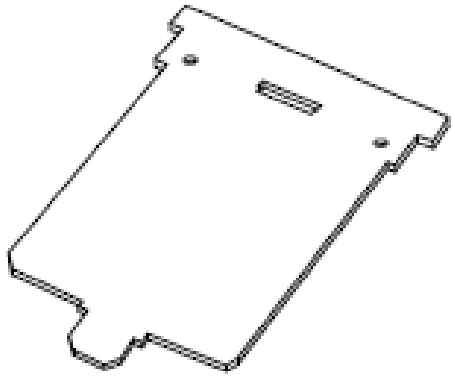


Note: For information on how to make corrections, refer to Roland DG SwipeGuide under [Scan Motor Replacement] > [Adjustment and confirmation].

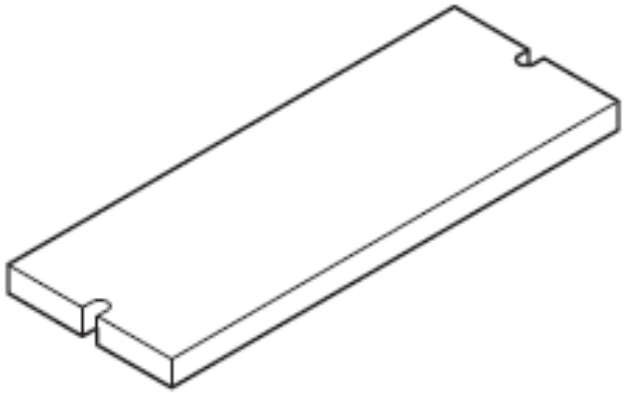
- User-replaceable parts for consumables
  - Users have been able to replace wipers, wiper cleaner, and flushing sponges, but now the print head cap has also become user replaceable.



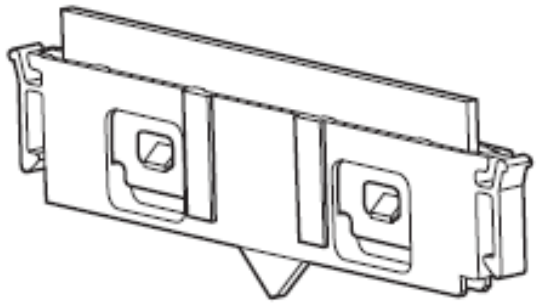
Print Head Cap



Wiper Cleaner



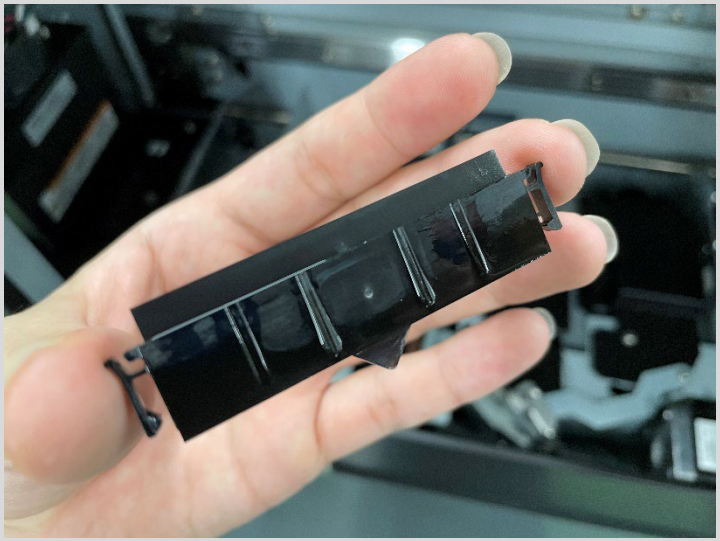
Flashing Sponge



Wiper Unit

- Wiper Unit (User Replacement)
  - Wiper Unit Replacement
    - The entire holder is replaced now instead of the single wiper unit.

Wiper Unit



Print Head Cap

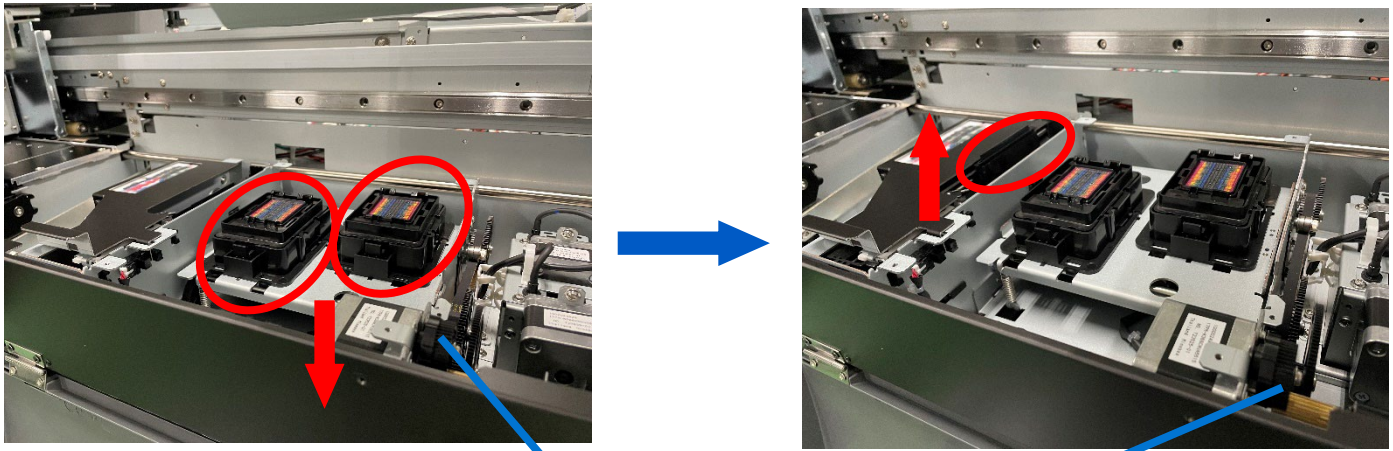
Raising and lowering of Print Head Cap / Wiper

Interlocking print head cap and wiper

- The print head cap and wiper are raised and lowered in tandem by the same gear.

  When the gear is turned to the rear and the print head cap is lowered to the lowest position, the wiper is raised.

  Similarly, when the gear is turned toward the front and the wiper is lowered to the lowest position, the print head cap is raised.

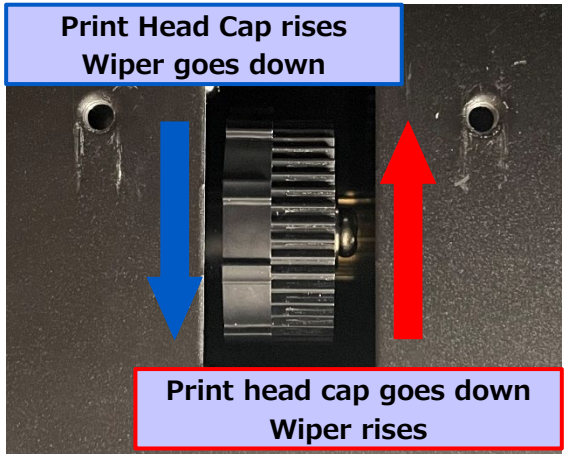


⚠ CAUTION
Excessive rotation of gear may cause damage.

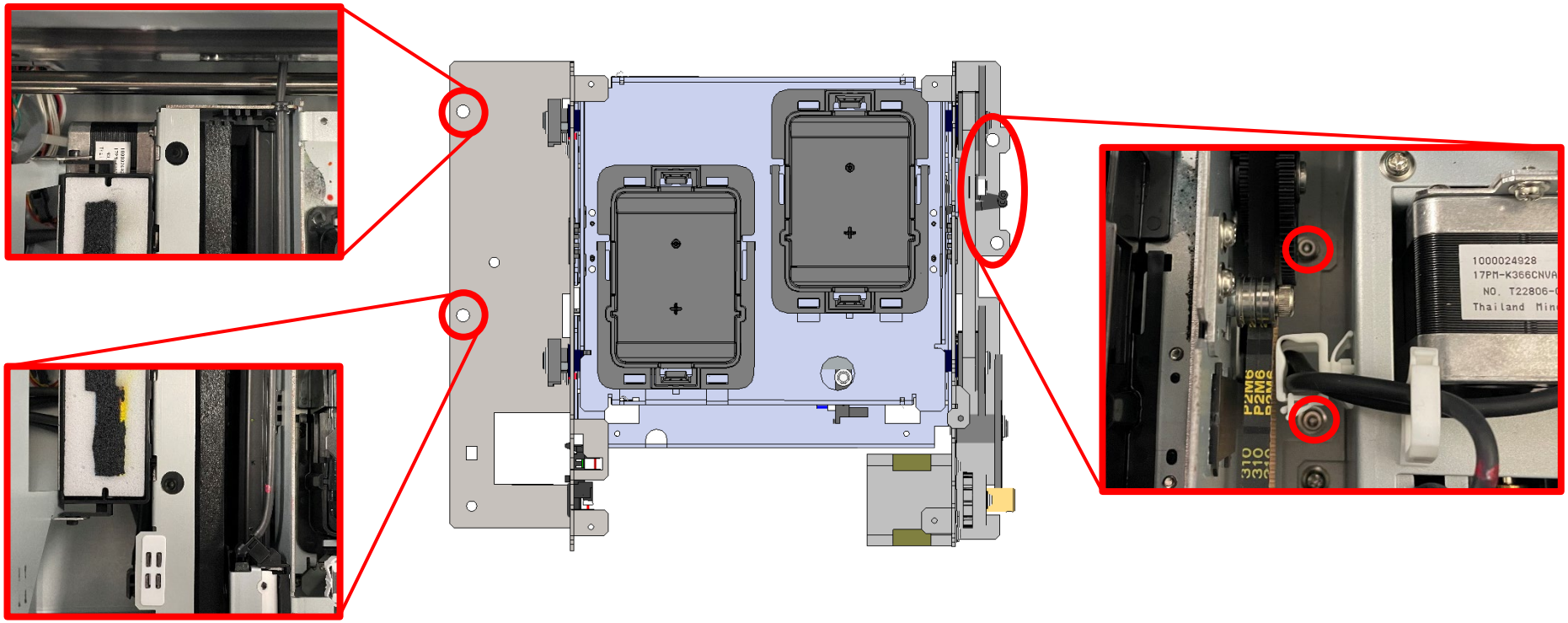
- Print Head Cap
  - Capping Method
    - ❖ Up and down elevation type

    - Turn off the power and manually turn the up/down elevation gear to lower the print head cap. Then unlock the carriage before starting work.
    - As initial sequence, head cap returns to the initial position when the power is turned on. When capping manually, the timing when the gear becomes hard to rotate is the reference that the capping has been done.

      *If the print head cap is pressed hard against the print head, it may adhere and not come apart.



- Cap Unit
  - Cap Unit
    - Do not remove the screws securing the bottom of the unit to the cap unit.



⚠ CAUTION
If removed, the cap unit cannot be returned to its proper position.

- Ink switching System(4 Color only)

Highly visible LED lamps are used

Lamp	Status
On	Cartridge in use
Blinking	Cartridge not inserted
Off	Cartridge in standby

- When the sub power is turned on, the cartridge with the least amount of ink remaining is used.
- When the ink becomes empty, it is automatically switched to the ink cartridge in standby.
- When the cartridge with low ink amount currently in use is pulled out and reinserted, this cartridge will be in standby mode and another cartridge with a higher ink remaining volume will be used.

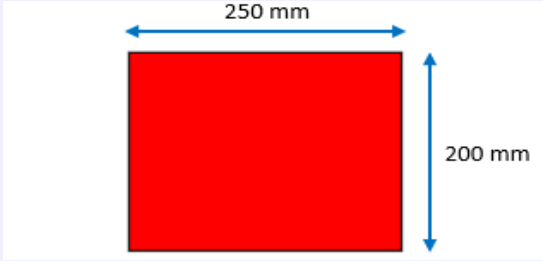
6. Installation

- Installation

Work description		Time required (min)	Total Time (min)
Unpacking/Assembly	Unpacking/Assembly	60	60
	Fixture removal	1	61
Ink Filling/Ejection Confirmation	Manual cleaning before ink filling	3	64
	Ink Filling	30	94
	Manual cleaning after ink filling	3	97
	Network Settings	3	100
	Ink ejection check	4	104
Adjustment	Cover removal	3	107
	Waiting for heater heating	12	119
	BIAS/VERTICAL Adjustment	10	129
	M-GAP DEFAULT Adjustment	3	131

- Installation

Work description		Time required(min)	Total Time(min)
Adjustment	HORIZONTAL Adjustment	3	134
	Cover installation	3	137
	Printing to check discharge	3	140
	Printing to check blurring	1	141

Ink Consumption		
Printing to check discharge		33.6ml
Printing to check blurring		1.0ml

- Installation
  - Required Items for Installation

Unpacking/Assembly

- Hexagonal wrench (accessory)
- Pipe (accessory)
- No.1 Phillips screwdriver

Ink Line Cleaning

- ESL4-CL2 4 pcs. (accessory)

Manual cleaning before/after ink filling

- TR2-CL2 (accessory)
- Dropper (accessory)
- Cleaning sticks (accessory)

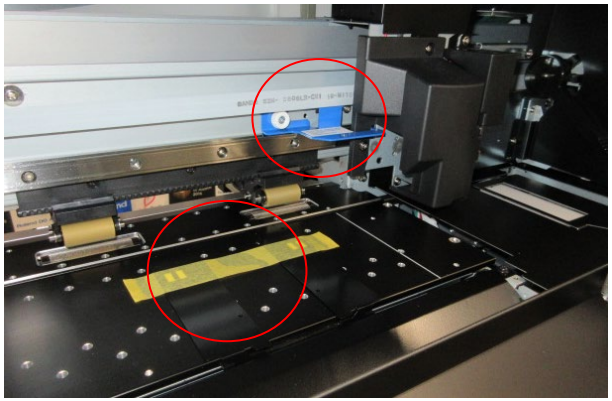
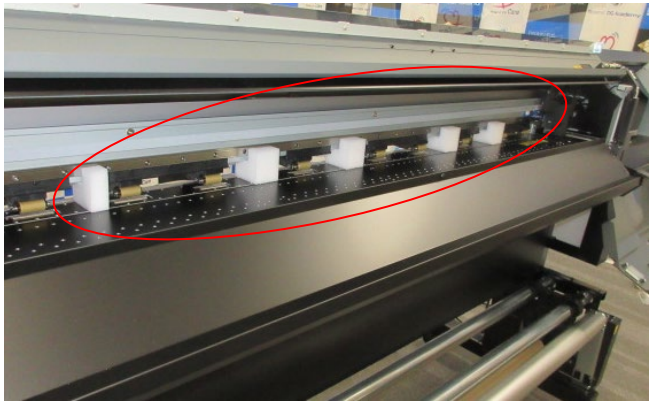
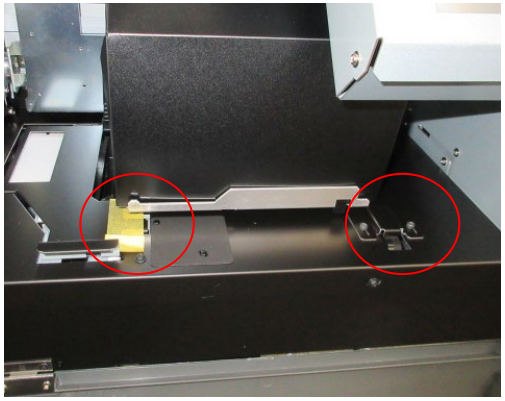
Print Head Alignment

- No.2 Phillips screwdriver
- Loupe
- ST-056 TORQUE DRIVER N6
- BIT, PHILLIPS NO.2 L200MM
- MEDIA, PET2-G 5SHEET SET 320MM ST-129
- 54" and larger PVC media
- Pre-PrintingTestData_1300x500mm.prt
- BandingCheckData_250x200mm.prt

- Installation Process
  - Tools required for unpacking/assembling work
    - Check the accessories and attach the printer body after assembling the stand.



  - Fixture removal
    - Remove the fixture and up/down elevation gear cover.

- Installation
  - Cleaning of ink lines
    - Clean the ink lines before ink filling.
  - Tools required for the work
    - ESL4-SL2 4 pcs. (accessory)
  - Timing of cleaning
    - Before Ink Filling
  - How to perform cleaning
    - Sub power on
    - Following the ink filling sequence, insert the cleaning cartridge and perform the cleaning

Installation Process Rev.1.1

Manual cleaning must be performed before ink filling to prevent missing dots on new print heads.

- Tools required for the work
  - Cleaning sticks ER-642: 6 pcs. (included)
  - TR2-CL2 (included)
  - Dropper (included)

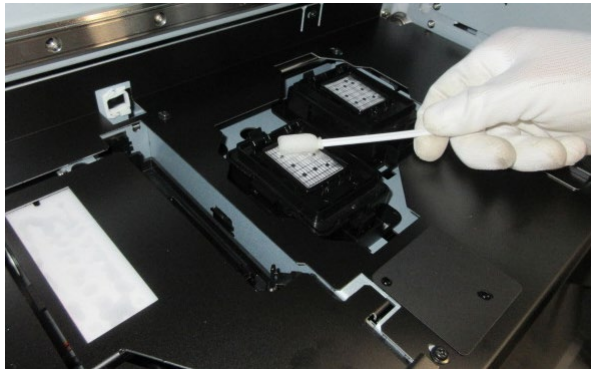
- Operation timing
  - During installation (during initial ink filling sequence)
  - When print head is replaced

Be sure to perform manual cleaning according to the instruction in Roland DG SwipeGuide at the timing described above.
Failure to do so may result in ink ejection failure, making recovery impossible.

Installation Process

Manual cleaning before ink filling

- After power-on, clean the print head, flushing sponge, wiper, print head cap, and wiper scraper with cleaning solution and cleaning stick according to the LCD display.




Ink Filling

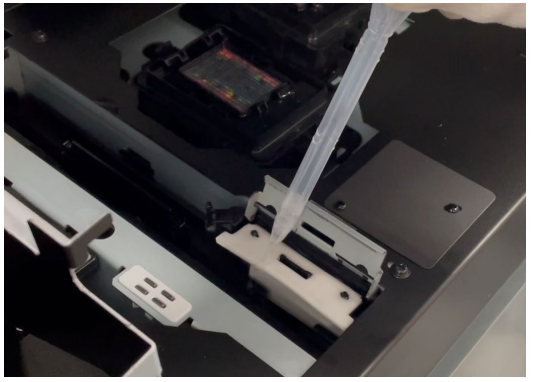
- Lightly agitate the ink and insert the ink cartridge.

Installation Work

Manual cleaning after ink filling

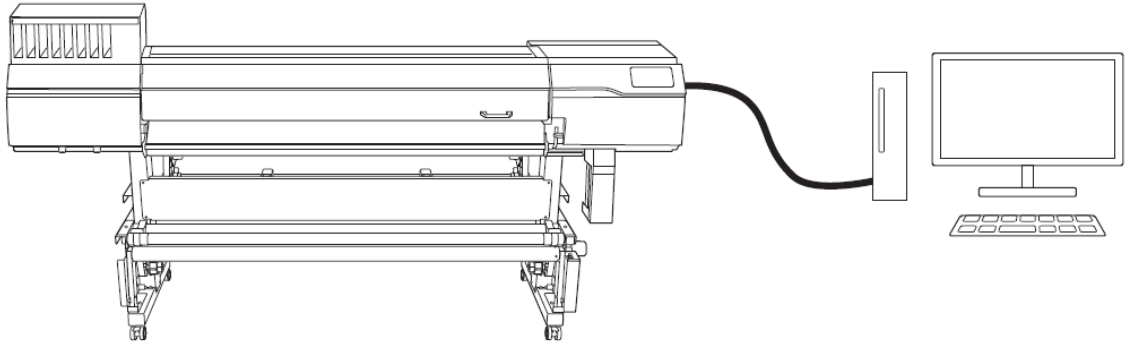
- Manual cleaning is performed again after ink filling is completed.

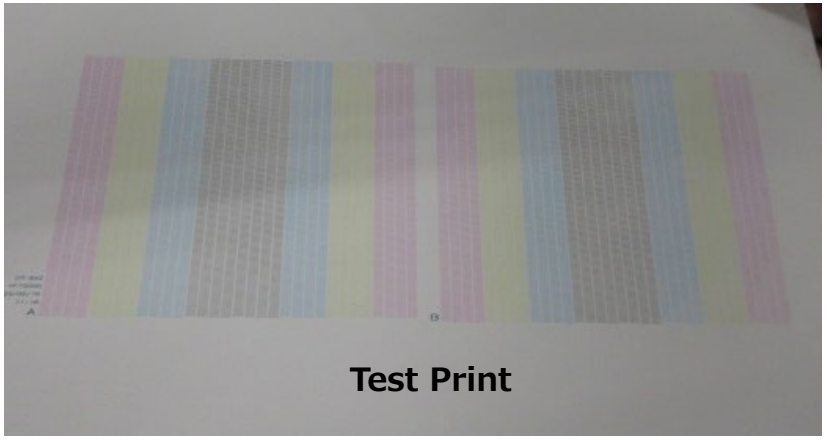




Network settings and checking ink ejection

- Refer to the installation manual for network settings and test prints to check for missing nozzles.





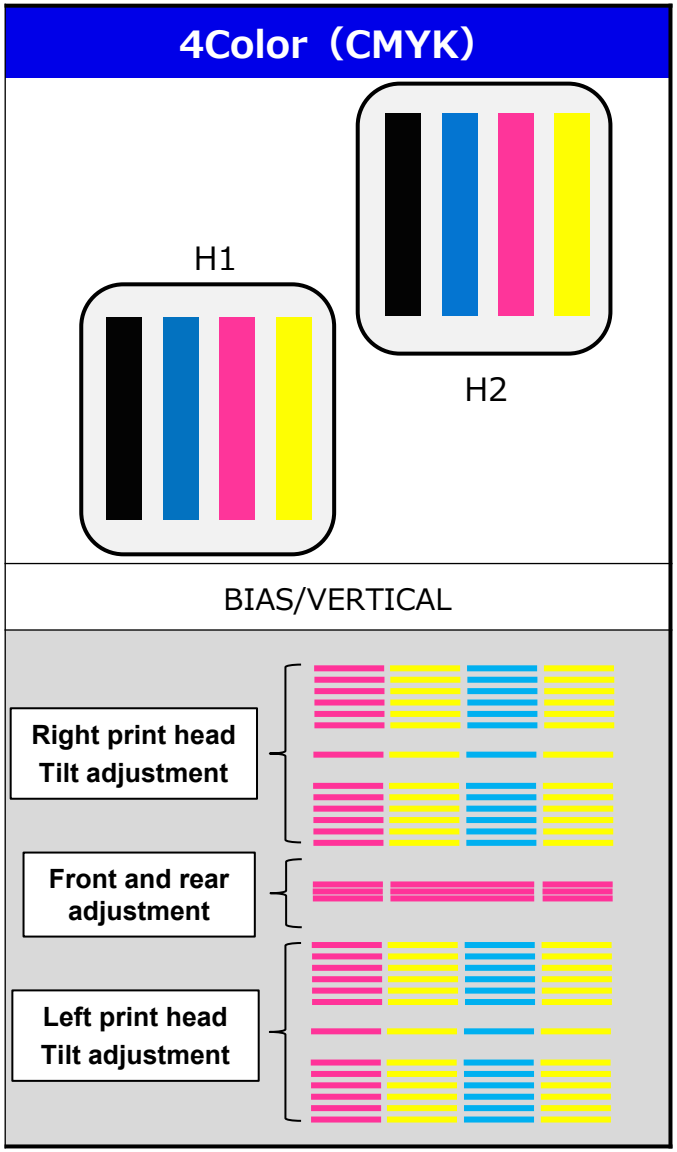
Test Print

- Installation Process
  - Print head alignment
    After confirming ink ejection, perform print head alignment.

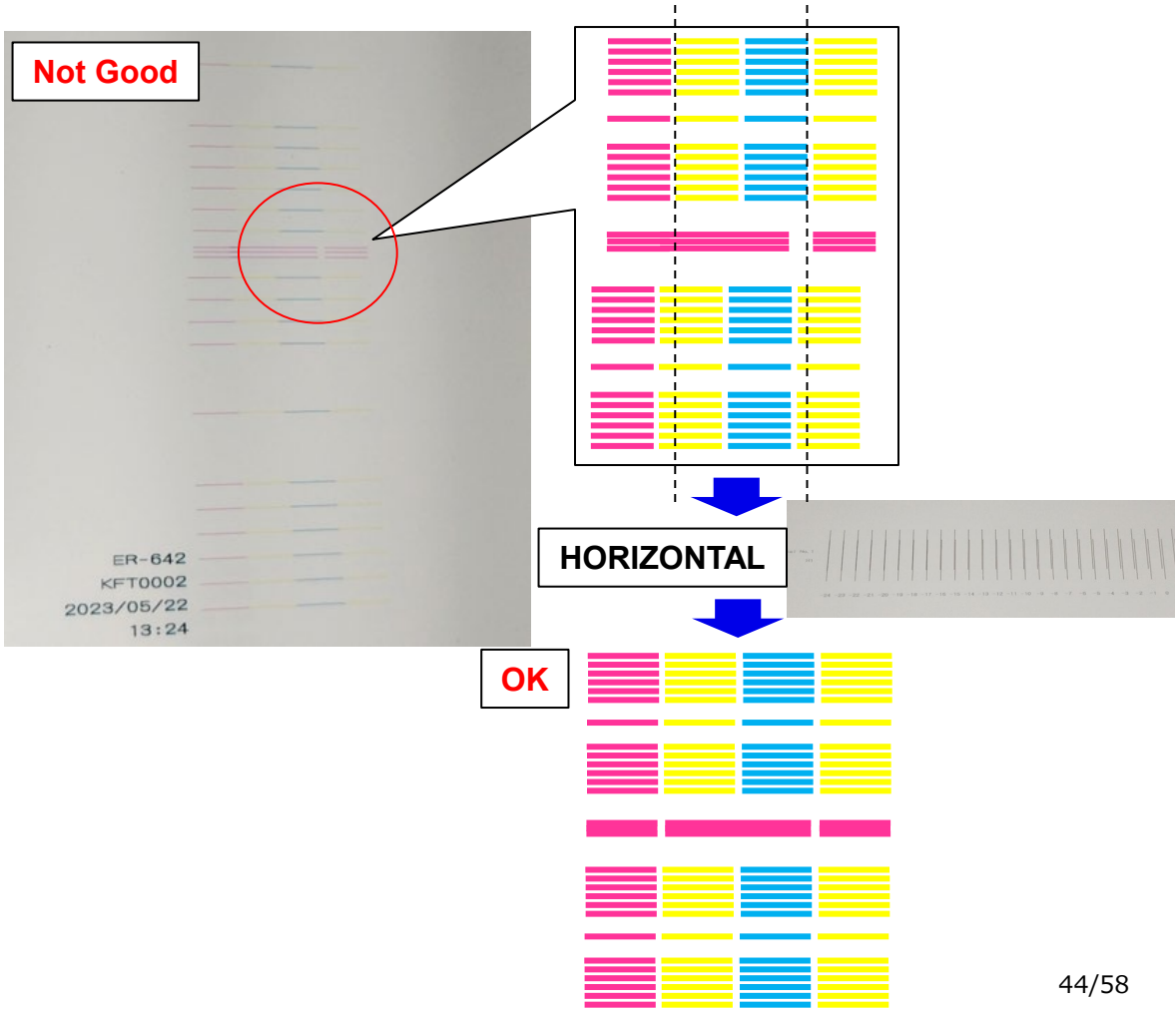
  - The CMYK double ink specification with stagger arrangement requires high-precision print head alignment. Therefore, the following conditions must be met for print head alignment.
    1. Worked at the center of the printer bed
    2. Heater temperature: 40°C
    3. Use the dedicated adjustment media PET2-G.
    4. BIAS/VERTICAL position adjustment shall be performed within 0.25 line tolerance.

  - Service mode and Support Mode
    1. Service Mode: Start Peck2, then press ←↓→+POWER.
    2. Support Mode: Press ←+POWER.

- About print head alignment
  - BIAS/VERTICAL Pattern



Note: Lines may be misaligned when BIAS/VERTICAL test prints are performed. If adjustment is difficult, adjust HORIZONTAL first and then perform BIAS/VERTICAL adjustment again.



- About print head alignment

1. XP-640 requires print head alignment at the center of the bed. Therefore, if test prints for BIAS/VERTICAL, M-GAP, or HORIZONTAL are made off the center of the bed, a warning will be displayed on the monitor and printing will not be possible. In that case, set the media in the center of the bed and perform adjustment again.

OK

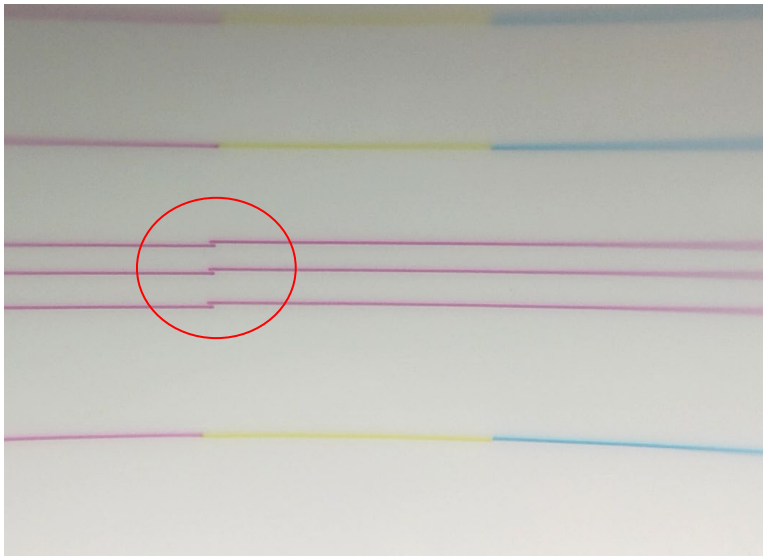
Not Good

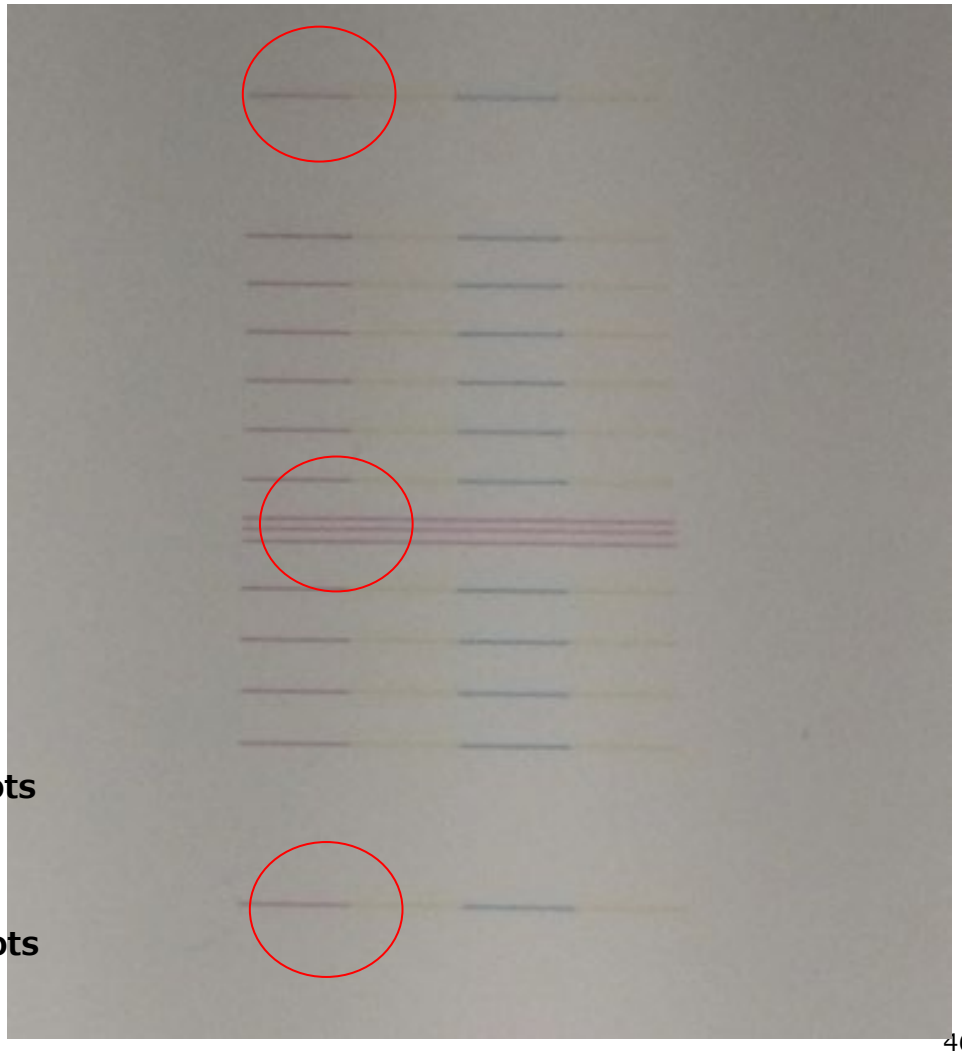
2. XP-640 requires the print head alignment to be made at a heater temperature of 40 °C. Therefore, the heater is automatically turned on for BIAS/VERTICAL, M-GAP, and HORIZONTAL test prints. Do not release [PAUSE] before the heater temperature has fully risen.

3. Be sure to use PET2-G for print head alignment of XP-640.

- About Print head Alignment

4. The BIAS/VERTICAL adjustment range differs from that of VG3 and LG. Be sure to keep it within 0.25 dots tolerance. (LG, VG3, etc. can be adjusted within 0.5 dots).





Rev.1.2

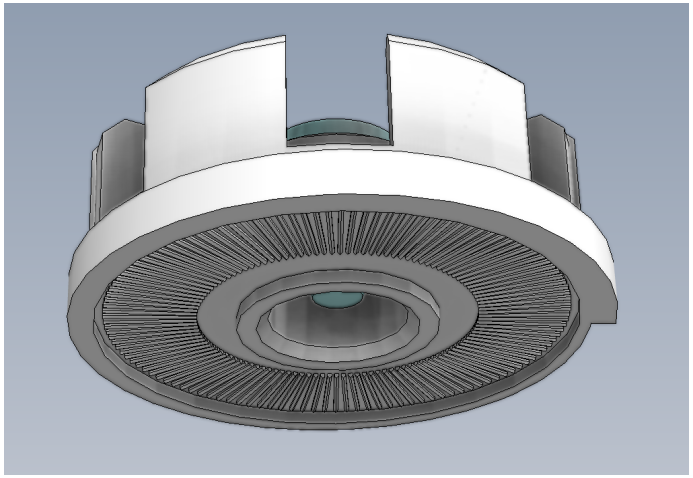
Within 0.25 dots tolerance

Within 0.5 dots tolerance

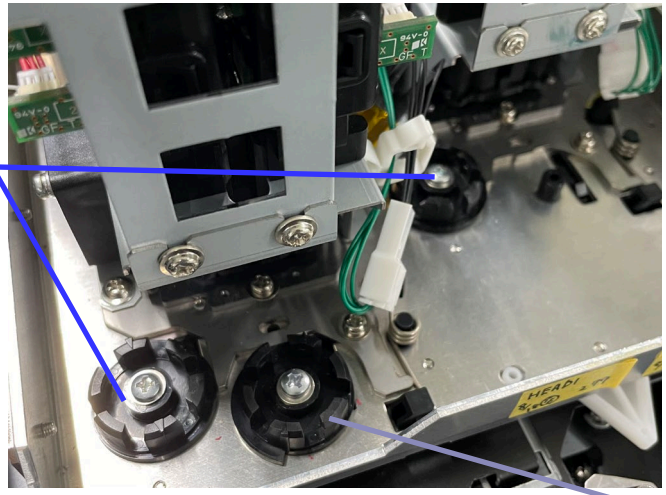
- Adjustment
  - BIAS/VERTICAL Adjustment
    - Adjustment dial

- When the dial is rotated, a plastic part enters the groove on the back of the dial and generates a “click”.
- There is a reference for how much BIAS/VERTICAL can be moved by one click.
- By comparing the width to be adjusted and the reference amount, the amount of rotation of the adjustment dial can be determined and adjustment can be easily made.

(Example) To perform BIAS adjustment for print head 1 by 1 dot, the dial is moved 20 clicks clockwise.



BIAS adjustment dial (Rotation reference)
1 Click=2.9µm (1/20 dot)
20 Clicks=1 dot



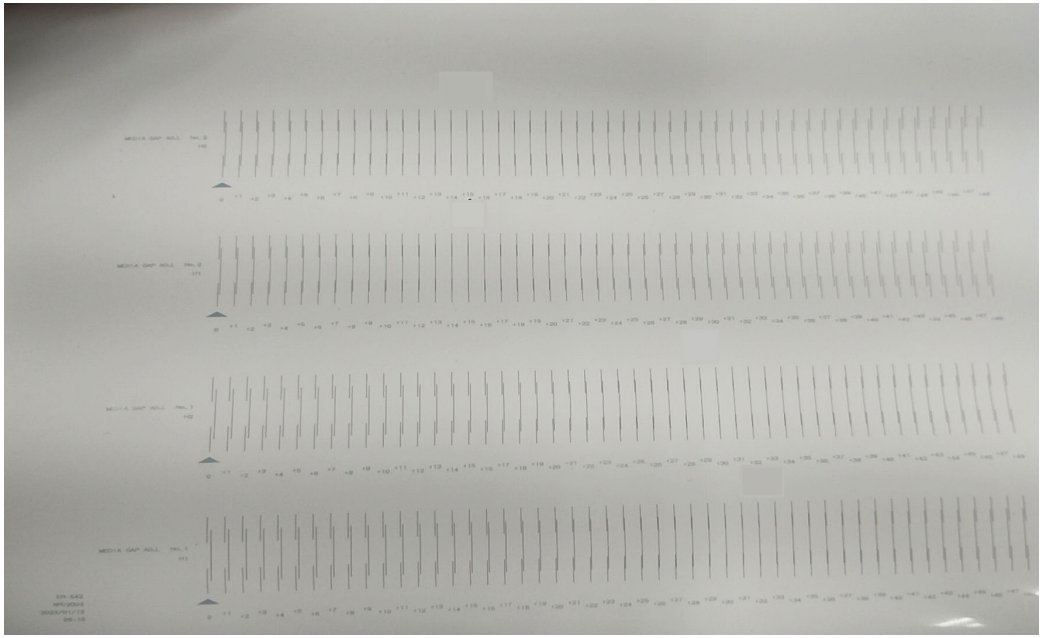
VERTICAL adjustment dial (Rotation reference)
1 Click=12.2µm (1/5 dot)
5 Clicks=1 dot

Misalignment tolerance is within 0.25 line.

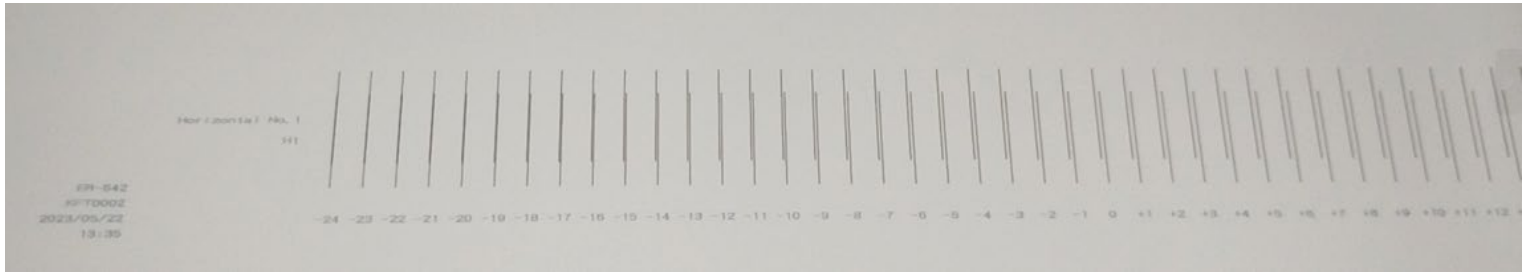
- Adjustment Work

For M-GAP DEFAULT and HORIZONTAL adjustments, input the numbers where the top and bottom black lines overlap the most from the following print patterns.

- M-GAP DEFAULT Adjustment



- HORIZOTAL Adjustment



- Check operation

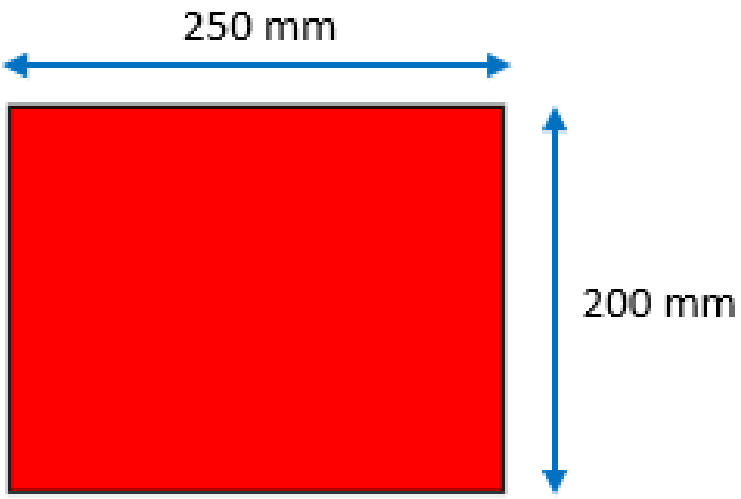
To check the condition of the print head, print the following data from VersaWorks to see if there is any smearing or blurring due to banding.

＊Please prepare 54" or larger PVC media.

＊Please prepare the data for printing in advance.

- Printing to check discharge
  - 1300mm×500mm

- Printing to check blurring

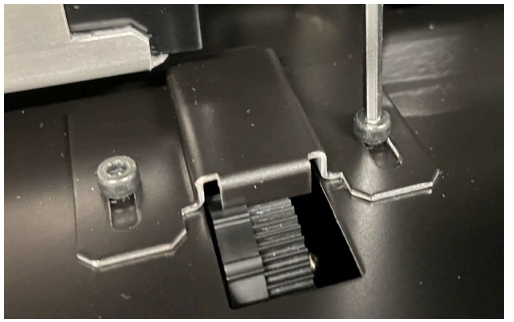


7. Transport

- Transport Method

1. Prepare the ESL4-CL2 cartridge.
   8 pcs

2. Execute [SERVICE MENU] > [SUB MENU] > [HEAD WASH].
3. Follow the display screen to remove the ink cartridges, install the ESL4-CL2 cartridges, and wash the inside of the ink path.
4. Discard the waste liquid from the drain bottle.
5. Fix the print head carriage with the fixture.
6. Install the cap up/down elevation gear cover with the front and back sides reversed.



⚠ CAUTION
The transfer should be completed within 2 days, and the power should be turned on immediately after the transfer.

8. Maintenance

- Ink Consumption
  - During maintenance

8Color	Gr	Cy	Or	Mg	Re	Ye	Lk	Bk	Total
Normal Cleaning	0.2	0.2	0.2	0.2	0.4	0.4	0.2	0.2	2.3
Medium Cleaning	1.2	1.2	1.3	1.3	1.5	1.5	1.3	1.3	10.5
Powerful Cleaning	1.9	1.9	2.0	2.0	2.4	2.4	2.1	2.1	17.4
Light Choke cleaning	9.8	9.8	9.2	9.2	9.9	9.9	9.9	9.9	77.1
Choke cleaning	14.1	14.1	11.8	11.8	14.2	14.2	14.1	14.1	106.8
4Color	**Cy**	**Cy**	**Mg**	**Mg**	**Ye**	**Ye**	**Bk**	**Bk**	**Total**
Normal Cleaning	0.5	0.0	0.5	0.0	0.8	0.0	0.5	0.0	2.3
Medium Cleaning	2.4	0.0	2.5	0.0	3.1	0.0	2.6	0.0	10.5
Powerful Cleaning	3.9	0.0	4.1	0.0	4.9	0.0	4.2	0.0	17.4
Light Choke cleaning	19.6	0.0	18.4	0.0	19.8	0.0	19.8	0.0	77.1
Choke cleaning	28.1	0.0	23.7	0.0	28.3	0.0	28.3	0.0	106.8

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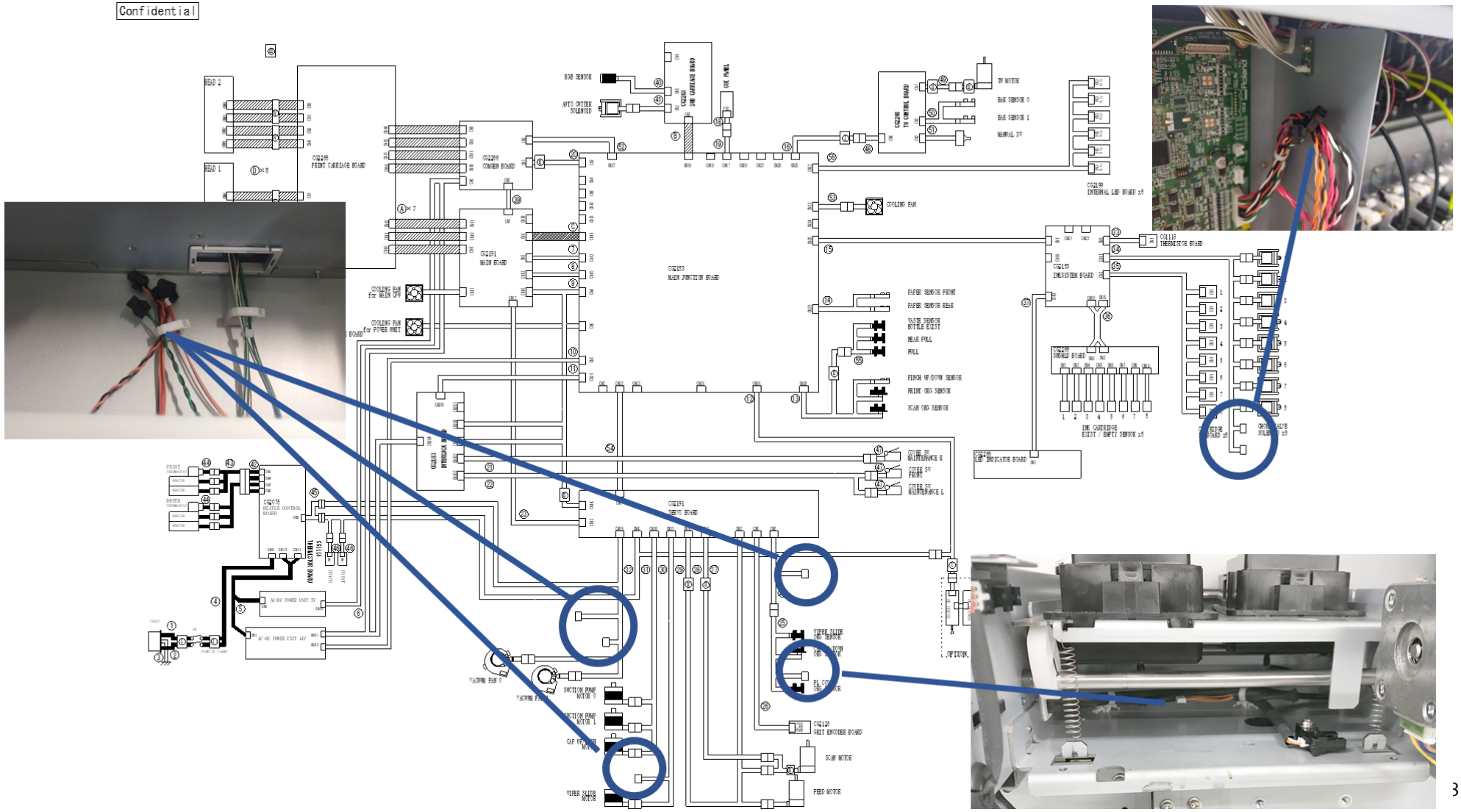
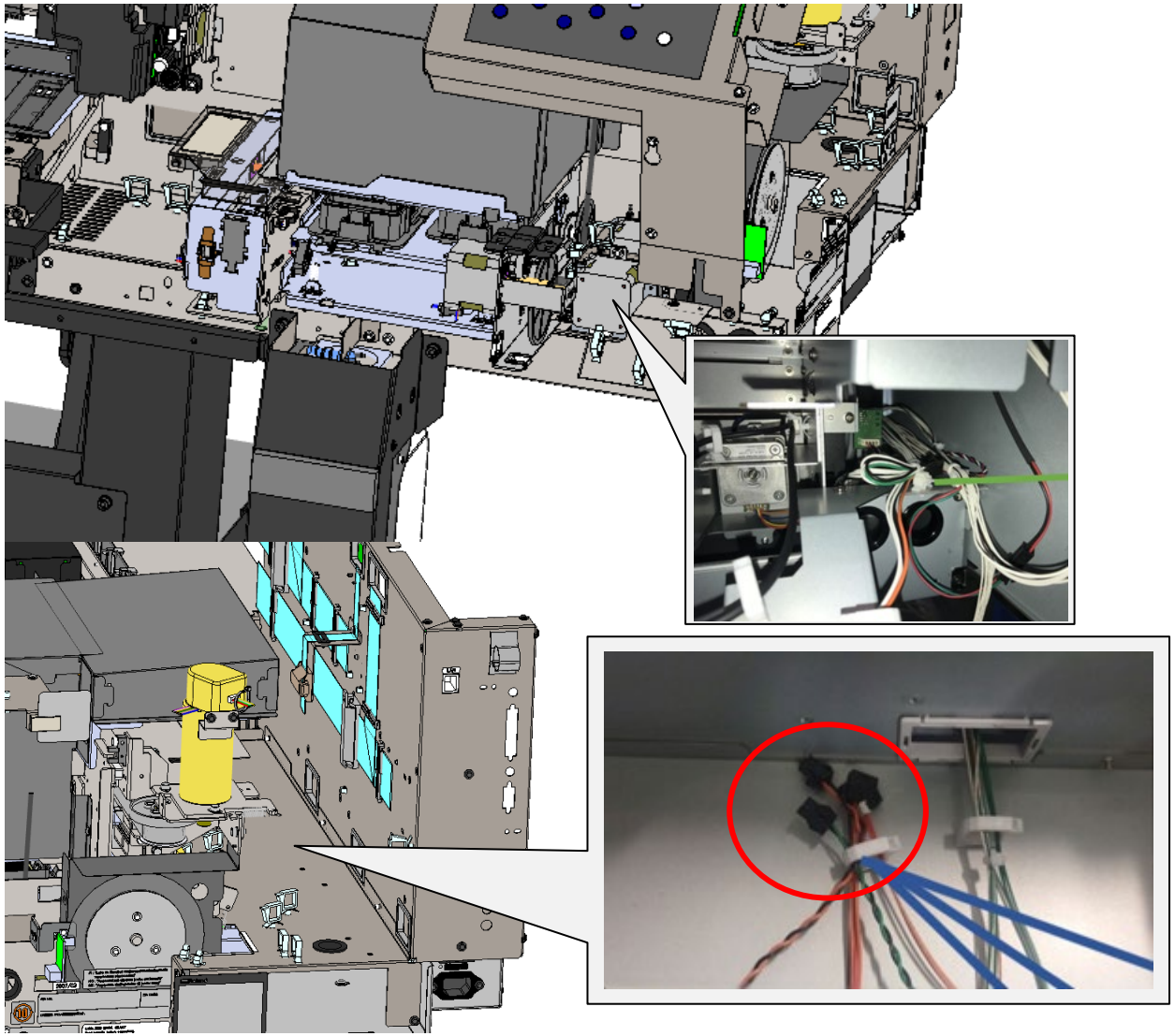
- Maintenance timing

  - “TIME FOR MAINTENANCE” will be displayed 7 days after the last manual cleaning. After 14 days, you will no longer be able to print unless you perform manual cleaning.

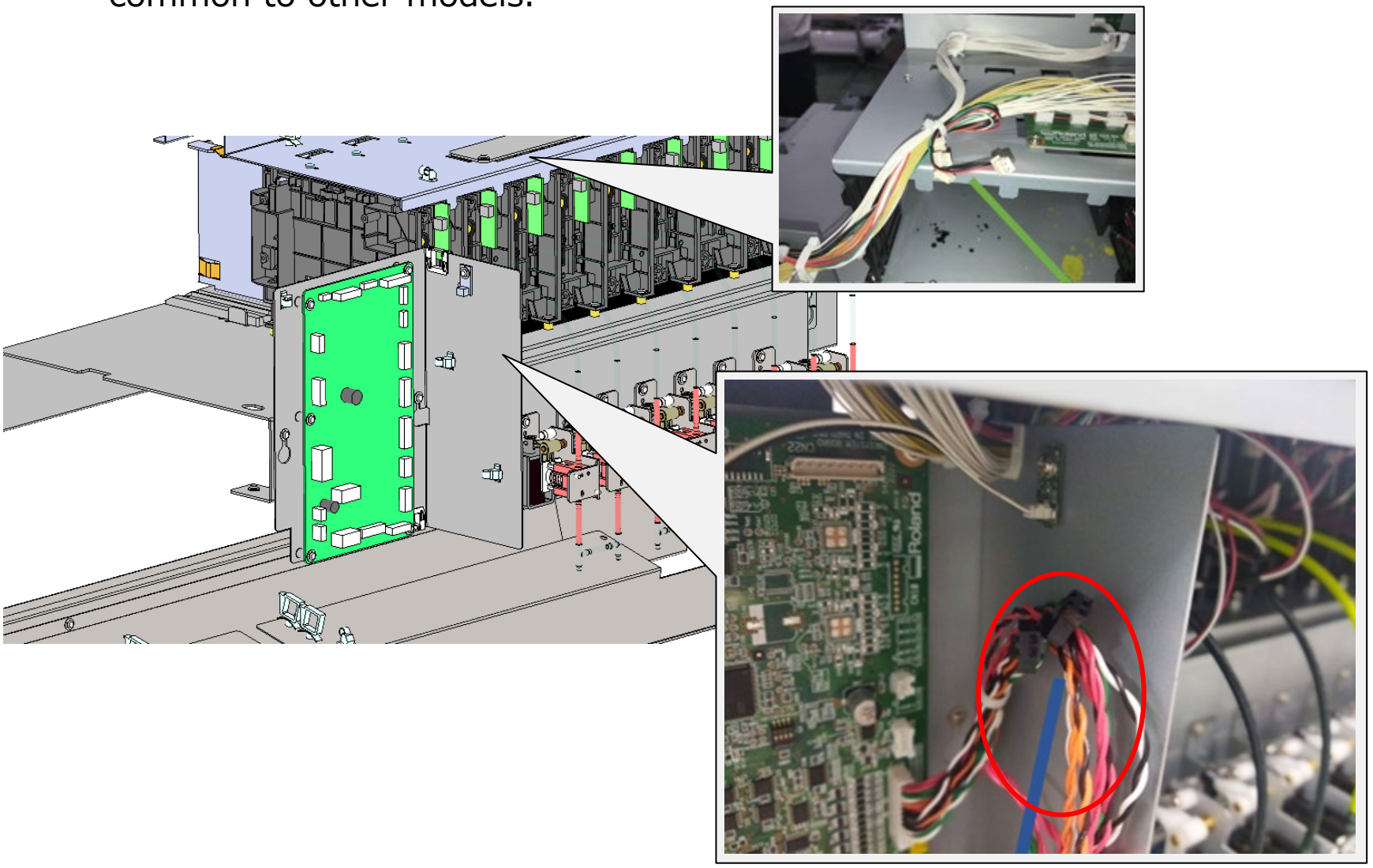
- Precautions for Board and Cable Replacement
  - Due to the sharing of parts with other models, some cables are not used as shown in the diagram below.



- Precautions for Board and Cable Replacement
  - Due to the sharing of parts with other models, some cables are not used as shown in the diagram below.



- Precautions for Board and Cable Replacement
  - XP-640 does not use some cables as shown in the figure because some parts are common to other models.



9. Software

- VersaWorks
  - Supported from Ver.6.22.0

- Roland DG Connect
  - Supported from Ver.3.8.0

Roland DG Connect
for Everything Creative

- Peck2
  - Supported from Ver. 3.40

For details, please refer to the product guides of each software.

10. Product Specifications

- Product Specifications

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CONFIDENTIAL

		XP-640
Printing method		Piezo ink-jet method
Media	Width	259 to 1,625 mm (10.2 to 64 in.)
	Thickness	Max. 1.0 mm (39.3 mil) with liner
	Roll outer diameter	Max. 250 mm (9.8 in.)
	Roll weight	Max. 45 kg (99 lb.)
	Core diameter	76.2 mm (3 in.) or 50.8 mm (2 in.)
Printing width (*1)		Max. 1,615 mm (63.5 in.)
Ink	Type	Eco-Solvent Ink (TH) 500 ml cartridge
	Color	4 colors(CMYK), 8 colors(CMYKLkOrGrRe)
Printing resolution (dots per inch)		Max 1,200 x 1,800dpi
Media heating system (*2)		Print heater set temperature: 30 to 45 °C (86 to 113 °F) Dryer set temperature: 30 to 55 °C (86 to 131 °F)
Connectivity		Ethernet (100BASE-TX/1000BASE-T, automatic switching)
Power-saving function		Automatic sleep feature
Power requirements		100-120 / 220-240 Va.c. 50 / 60 Hz 8.9 / 4.5 A
Power consumption	During operation	Approx. 1,180 W
	Sleep mode	Approx. 50 W
Acoustic noise level	During operation	66 dB (A) or less
	During standby	53 dB (A) or less
Dimensions (width x depth x height)		2,886 mm x 748 mm x 1,415 mm (113.7 in. x 29.5 in. x 55.8 in.)
Weight		189 kg (415 lb.)
Environment	During operation	Temperature : 20 to 32 °C (68 to 89.6 °F) , humidity : 35 to 80 % RH (no condensation)
	Not operating	Temperature : 5 to 40 °C (41 to 104 °F) , humidity : 20 to 80 % RH (no condensation)

11. Periodic Replacement Parts

- Periodic Replacement Parts

Rev.1.4

Item Name	Approximate timing of replacement
Print head	50 billion shots
Wiper	Wiping 3,000 times or 6 months
Wiper cleaner	Wiper cleaning 1,000 times or 6 months
Flushing sheet	6 months
Print Head Cap	6 months
Scan motors	3,000 hours
Ink tube	3,000 hours
Lithium battery	24 months